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the Journal

OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

HIGHLY EFFECTIVE CYCLIC THERAPY in amenorrhea

NORLUTIN

(norethindrone, Parke-Davis)

In gynecological disorders amenable to progestational therapy, clinical effects of injected progesterone can now be produced by small oral doses of NORLUTIN. In amenorrhea, for example, 10-20 mg. daily for 5 days—after estrogen priming—will induce "...a prompt temperature rise and withdrawal bleeding 24-72 hours after medication is stopped."[1]

CASE SUMMARY[2] Amenorrhea of four years' duration in a 24-year-old married woman. A course of 10 mg. NORLUTIN, twice daily for five days, was followed after three days by menses. When no spontaneous menstruation occurred during the following 35 days, this treatment was repeated and again induced menses. Using ethisterone, similar results were unobtainable in this patient.

INDICATIONS FOR NORLUTIN: conditions involving deficiency of progesterone such as primary and secondary amenorrhea, menstrual irregularity, functional uterine bleeding, endocrine infertility, habitual abortion, threatened abortion, premenstrual tension, and dysmenorrhea.

PACKAGING: 5-mg. scored tablets, bottles of 30.

REFERENCES: (1) Greenblatt, R. H., & Jungck, E. C.: *J.A.M.A.* 166:1461 (Mar. 22) 1958. (2) Hertz, R.; Waite, J. H., & Thomas, L. B.: *Proc. Soc. Exper. Biol. & Med.* 91:418, 1956.

MEDICAMENTA VERA · P Co

PARKE, DAVIS & COMPANY · DETROIT 32, MICHIGAN

75th ANNIVERSARY

Journal of the American Medical Association

It is a pleasure for *The Journal* of the Oklahoma State Medical Association to designate this issue as a tribute to the 75 years of leadership in medical journalism to the *Journal* of the American Medical Association. The articles and the quotations contained herein are reprints from the 75th Anniversary issue of the J.A.M.A. by permission of the editor, Doctor Austin Smith. The contributors, all men of distinction in their chosen fields, exhibit a concept of responsibility for total human welfare that should hearten the leaders of the medical profession in helping America to achieve it to the fullest extent possible. The only note of uncertainty in our partnership in progress is the absence of a contribution from a representative of Labor. If this reflects a lack of what it may take to work together, perhaps it will be the necessary impetus to acquire those things or that state of mind for both which will make this possible.

Partners in Progress

Of all the words used in everyday conversation few are more exciting than "progress." This eight-letter word does as much to excite the imagination as any other term, technical or otherwise. One may speak of miracle drugs, atom power, solar energy, and electronics, and audiences think of almost unbelievable developments—but often without any thrill of excitement. Let a speaker, however, mention the possibility of a review of what progress means to the members of an audience, and one can almost hear a stir of anticipation. Somehow this precipitates a train of thoughts that even the most conservative listener finds difficult to hold within nonfanciful bounds.

The Journal of the American Medical Association is now 75 years old, although in this modern age there is a temptation to use the words 75 years young. It is not four score years old, and yet more significant events have occurred during this time than, perhaps, in hundreds of preceding years. It makes no difference whether one thinks of engineering, medicine, law enforcement, or any other field; the changes that have occurred are so dramatic, so challenging, it is difficult to think of any corner of the earth, any phase of life, that is not being affected. And this is only the beginning. What is on the horizon seems even more fantastic to contemplate.

Most of us accept our modern miracles with little more than passing wonderment or sometimes momentary thankfulness. Often we do not understand; usually we do not appreciate. In fact, too often our eyes and our thoughts remain confined to our own fields of interest without realizing how much each field contributes to another, how much each is dependent on another, or how many people and how much training and experience are involved in the various areas of effort.

Elsewhere in this issue of *The Journal* are articles from acknowledged leaders in their fields. They are known internationally, and yet they can think in terms of the individual as well as of a nation or of the world. As one reads their writings, there grows a recognition and an appreciation of a fundamental fact: they are all partners in progress. No one could be a symbol for his field if he had stood alone or if his area of interest had been completely isolated from the rest of the community. They served their communities as well as their organizations or businesses and in so doing extended their influence throughout the country and even elsewhere in the world.

The practicing physician likewise serves more than his patient. He is part of community life, and his work influences as widely that of others as they in turn influence his work. No one can exist without the direct or indirect contributions of others, which is forcefully proved by the appearance of our guest contributors in the pages of this issue of *The Journal*. Physicians as well as our guests know this, but do others, especially those who are quicker with criticism than with thoughtful suggestion? Maybe the latter might be made candidates for the development of the theme "Partners in Progress." An explanation here, as example there, might be sufficient to change the misunderstanding critic into a helpful ally. If the people of the United States believe in the principles on which this nation was built, they must demonstrate a willingness to insist on the continuation of these principles. Leadership is necessary, but understanding is as important. Who can better provide the explanation and the examples than such men as our guest contributors and the many others who are acknowledged in their fields?

Writer, news commentator, industrialist, educator, name whom you will, are all partners in living in our country. This in itself engenders a depth of responsibility that is sobering, but when one remembers that much of the world today is looking for leadearship, all of us must be mindful of additional responsibility as we work and play. Perhaps the people in some of the countries elsewhere might have had fewer problems if they had paused long enough in their work and play to encourage men and women to shake hands with each other as partners in orderly progress. Maybe there would be less fist shaking today.

Austin Smith, M.D.
Editor, Journal of the American
Medical Association

THE WHITE HOUSE
WASHINGTON

April 9, 1958

Dear Dr. Smith:

It is a privilege to extend felicitations to the Journal of the American Medical Association on its 75th anniversary.

I have long been aware that the Journal has, throughout its lifetime, been a potent force for progress in the field of medical discovery and medical information. The contribution its editors make to medical advancement is reflected daily in better health for the people of this country and the world.

Throughout my lifetime of service in the Army, as well as in my present position, I have watched with pride and interest the giant strides that have been achieved toward a rising standard of health for people everywhere. The Journal of the American Medical Association has reported these advances faithfully, and its editors must share with me both a sense of deep accomplishment and the conviction that in the years to come the horizons are truly unlimited.

With best wishes to you and to the Journal,

Sincerely,

Dwight D. Eisenhower

Dr. Austin Smith
Editor
Journal of the American Medical Association
535 North Dearborn Street
Chicago 10, Illinois

MEDICINE *and* EDUCATION

HARLAN H. HATCHER

If one were to prepare a graph to illustrate the rise and fall in the fortunes of medicine and education in the United States since colonial times, he would find that the lines representing each could almost be superimposed, so similarly have these fields fared.

From the time that "Dr. Lambert Wilson, chirugeon" taught the first medical students at Massachusetts Bay Colony, in 1639, until the modern debate over the role of the humanities in the education of all citizens, there have been noteworthy parallels between medicine and general education.

This is not unnatural for the success of an educational program can be measured by its products and their accomplishments. Abraham Flexner wrote in 1925 that "medical education cannot be described or discussed apart from general education. The maturity, previous training, and intellectual competency of the student body determine in advance the scope, quality, method, aims and outcome of the instruction offered by the medical faculty." It has even been argued that the strength and prestige of the medical profession through the years have been directly related to liberal content of the premedical programs.

Then, too, the ebb and flow of social, economic, and political forces during the history of the United States have affected both fields in similar ways.

Both education and medicine were largely dependent upon European achievements in the early colonial period. The apprenticeship system, with all its virtues and shortcomings, came from England. As the deficiencies of the system became recognized, the more ambitious students returned to Edinburgh, London, Paris or Leyden for their medical training. It is interesting to note that the "deficiencies" may well have included lack of breadth, a problem with which educators still struggle today. The apprenticeship system served the colonies well during the 17th and 18th centuries, but the real advances in medicine came from abroad. "European-educated physicians had a certain knowledge that the apprenticed men were lacking," one observer noted.

Several excellent educational institutions were established in this era, and they have since grown into some of the ranking schools of the world. However, during this stage of their growth they were very frail and, for the most part, not very consequential institutions. They were classical, theological, and primarily for those who could afford them. The new nation was not to approach its educational potential for many decades after its creation.

As the United States expanded during the 1800's, medicine and education alike suffered acute growing pains. The outline of the continent was sketched in from coast to coast. The population curve was rising. There was a job to be done, and America was impatient to get on with it. Plato, Sophocles, Shakespeare, Spenser, Milton, Herodotus, and Gibbon obviously were of little value to people tilling a hemisphere and extracting its resources. Besides, this distinguished company was not for the common man—and they would take up valuable time. The physical sciences, applied to America's needs and developed into vocational techniques, seemed to be the answer. Like the camel in the parable, they put their nose in the tent, and the humanistic pilgrim was soon out in the desert.

The early medical schools, which had established standards and programs as rigorous as those in European universities, also gave way under the pressure of this materialistic philosophy. The growing nation required doctors, so the requirements for the M.D. degree

sagged. Medical schools sprang up independent of the universities. In many cases they were financed entirely by tuition and tended to become commercial enterprises. The quality of instruction varied; scholarly ideals were compromised and forgotten. One hundred years were to pass before the profession fully recovered.

The noxious proprietary schools mushroomed in answer to the demand for physicians. In 1800, there were four medical schools in the country; in 1860, there were 66; at the end of the 1800's there were 160. In little more than a century, the United States and Canada gave birth to 457 proprietary schools, most of which were short-lived.

"No applicant for instruction who could pay his fee or sign his note was turned down" for admission to these schools, Flexner said in his historic report. "The man who had settled his tuition bill was thus practically assured of his degree, whether he had regularly attended lectures or not. The school diploma itself was a license to practice."

It comes as no surprise that there was little if any room for college preparation in these brief programs, much less for those who had concentrated on the humanities. Medicine was taught as an art rather than as a science.

"A college education is one of the luxuries of life, never a necessity," one man wrote. "The only way to learn about disease is to take care of sick people," another observed.

And so the nation grew, with emphasis on the three R's and on the mass production of men ostensibly capable of reducing fevers, mending broken bones, and treating wounds.

To be sure, there were voices of protest. Thomas Jefferson, that amazing American with a restless and omnivorous mind and with unsurpassed vision and understanding, was among the first to point out the inadequacies and handicaps of the nation's cultural dependency upon Europe. He counted the establishment of the University of Virginia as his proudest moment.

A stronger voice was that of Ralph Waldo Emerson, who sounded his "Intellectual Declaration of Independence" in 1837. "Perhaps the time is already come when . . . the sluggard intellect of this continent will look from under its iron lids, and fill the postponed expectations of the world with something better than the exertions of mechanical skill. Our day of dependence, our long apprenticeship to the learning of other lands, draws to a close. The millions around us that are rushing into life cannot always be fed with the sere remains of foreign harvests."

There were two important points in this statement. The first was that it was America's responsibility to make its own contribution to the fund of knowledge through scholarship. The second was the challenge for Americans not to be content with manipulative skills, not to be merchants and farmers and accountants, but to be informed and cultivated men and women who are also good mechanics, farmers, and accountants.

In the medical profession, other voices were heard. In 1847, the American Medical Association was founded to raise the standards of medical education on all fronts. Licensure requirements, abandoned for many decades were reinstated. At my own university, the president reported, in 1874, "An examination for admission was held (for students entering medicine). Though the requirements were very slight, it was found necessary to reject some of the applicants, whose ignorance was profound." In 1875, "more than a dozen rejections" were reported.

Others in the profession looked to liberal education for premedical students as means of improving the prestige of medicine, of facilitating its study, and of improving its practice.

"Every preceptor and professor knows how much better a young man with a liberal education can pursue his studies," a Pennsylvania physician wrote late in 1870, "and with how much more credit he will pass his final examination than the uneducated and untrained, other things being equalled."

These voices were not so loud as Emerson's, however, so it was not until the second decade of this century that medicine was to recover.

As it was, Emerson was not heeded until 1876, when Johns Hopkins University was founded. Breaking with the past, this institution was the first with European standards of advanced study in the arts and sciences. Other schools followed suit. With the advanced standards came increased emphasis on research, instead of passing along knowledge gained in Europe, American scholars began creating it.

Here we find the curve of general education swinging upward much earlier than that of medicine. The lag may be attributed largely to the fact that medical schools had sprung up independently of the universities and that even medical colleges of the universities were virtually separated from the parent institutions.

"Before that (the founding of an independent proprietary school in Baltimore early in the 18th century) a college of medicine had been a branch growing out of the living university trunk," Flexner wrote. "This organic connection guaranteed certain standards and ideals, modest enough at that time, but destined to a development which medical education could, as experience proved, ill afford to undergo. Even had the university relation been preserved, the precise requirements of the Philadelphia College (University of Pennsylvania) would not indeed have been permanently tenable. The rapid expansion of the country, with the inevitable decay of the apprentice system in consequence, must necessarily have lowered the terms of entrance upon the study. But for a time only: the requirements of medical education would then have slowly risen with the general increase in our educational resources. Medical education would have been part of the entire movement instead of an exception to it."

Separated from the universities and concentrating upon the production of students, medical institutions failed to recognize for 50 years the full potential of the scientific discoveries which began to flow out of the laboratories of Europe and America in the 1800's.

Once medicine became aware of the power of science, however, it could not be accused of slighting it. In actuality, the reverse was true. Science became a religion to leading medical educators, and it tended to dominate medical training. It was only in the late 1920's that the humanities, arts, and social sciences won a significant place in the preparation of doctors. Some observers believe that medical education has become most effective since the introduction of the humanities and the lessening of the excessive emphasis on science and specialization.

Today, both medicine and education still suffer from the curse of practical demands. In medicine, scientific preparation still is heavily weighted; in general education, we provide the narrowest of training in a bewildering number of fields. There is the great danger that, in attempting to meet a multitude of special demands, American education has overextended itself. We have diversified so widely, we have produced such refined and isolated technicians, so many vocabularies and departmental jargons, that we cannot even communicate between faculties.

Yet it is difficult to take issue with the towering technological success our nation has enjoyed. Such success carries its own justification, but it also contains the seeds of its own inadequacies. We have done so much so well, and with such comparative ease, that we have made a philosophy out of our materialistic triumphs. We made ourselves believe that if we could improve our living standards, shorten hours and raise wages, lighten or do away with physical toil, and stay in isolation between our oceans and away from the wars, we would automatically reach our goal of human happiness as envisioned in the Declaration of Independence.

All these things were worthy and needed to be achieved, but they failed to include the larger dimensions of man's capacity. For we are not bound solely to earth and time, and we cannot fulfill our destiny solely with material things, with techniques and goods. Something significant, perhaps the key to the whole adventure, escapes this process and leaves us short of our high hopes. We have attained no peace or quiet among our perfected machines.

It is not uncommon these days to hear those who have been trained almost exclusively in the vocational or more specialized fields speak of the warping and even frustrating effects that have resulted from this overemphasis or this omission.

In essence, the external and technical process by which we have achieved our lofty position in the world has tended to rob us of the wisdom, the judgment, the spiritual resources and calmness of soul without which we may not understand the nature of our testing or meet it in our grave hour with success.

The sweep of our history, the perspective of our own moment in history, the instruments which we have forged to integrate our mutual lives, the great moments of vision and truth experienced by our finest souls and reported to us through the magic of literature —these things are as vital to our happy survival as the technology of modern industry. We have ignored or neglected them.

The greater our progress toward our materialistic goals, the more insistent and disconcerting have become the forebodings about the completeness of the result. Harsh experience is thus teaching us what the prophets of old and the wiser of our forefathers knew full well: that happiness may not be pursued as a goal within itself, that man does not live by bread alone, that neither will he perish by bombs alone.

I have no doubt that education and medicine will answer the immediate problems which confront them. The solutions will not come easily, but they will come. The larger worry and the larger concern for higher education in the American system lies in this other dimension of which I have spoken: a richer and more humanistic training that will enable our students to understand that the sole end of their education is not the mere manipulation of the gadgets that go with modern civilization or modern warfare.

And so general education and medicine have traversed a long path together, affecting, and affected by, each other. It is my hope that these partners will in the future pay greater heed to the words of Emerson, despite the demands of the day: "We lie in the lap of immense intelligence, which makes us organs of its activity and receivers of its truth. . . .The lesson of life is to believe what the years and the centuries say against the hours; to resist the usurpation of particulars; to penetrate to their catholic sense."

It is that realm in our education and private contemplation with which we are not now sufficiently reckoning. But there are signs that we are beginning to learn of this mistake, so see where we have done well and where we have failed. This is essential if the oncoming generations are to exist harmoniously in the world which we have created for them and which they will have to manage and direct.

Harlan H. Hatcher
President of the University of Michigan

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MEDICINE AND AGRICULTURE

. . . For more than 25 years, we in agriculture have been experimenting with a variety of government programs designed to legislate prosperity into agriculture. These attempts to fix prices at profitable levels and to regulate the production of certain crops have largely failed. We have learned that economic forces cannot be denied by political action, as surpluses have piled up, substitute products have captured our markets, and farm prices and income have gone down. The American Farm Bureau favors policies "which will make it possible for farmers to earn and get a high per family real income in a manner which will preserve freedom and gradually eliminate government regulation of individual farming operations." In other words, we are as strongly opposed to a socialized agriculture as medical people are to socialized medicine. We are ready to cooperate to oppose both threats.

Charles B. Shuman
President, American Farm
Bureau Federation

DEDICATION

JOHN STEINBECK

The great critic Boileau said long ago that the only figures worthy of Literature are Kings, Gods, and heroes. For today we must substitute for heroes those people who break free of a constricting pattern, who overcome insuperable difficulties, or who with inner courage or gallantry or determination resist pressures or drive through opposition or difficulty to a desired end. These are the heroes of our time—even if they try desperately and fail—these, it seems to me are the raw material of Literature.

A wise and cynical friend of mine handicaps life as seven to five against. I think he is largely right, but when horses or men buck the odds and win—we have champions and we also have Literature. Perhaps also it reassures all of us that neither odds nor gods are all powerful.

I think I have a good example of this in the creation of a doctor. I have watched it happen year by year, and it makes me a little impatient with the despairing cries of lost or beat generations who lose before they have laid down a bet.

Next door to my little house in New York there is a newsstand and store so tiny that when two people go in at once they have to move sideways. It is run by a family named Spivack—Mr. and Mrs. Spivack and their son and their daughter. They sell newspapers and magazines, tobacco, candy bars, cards, string, soda, ice cream, paper clips, glue. The margin of profit is small—the hours incredibly long. At five in the morning the stand is open for the morning papers. At midnight it is still open for the late editions. It is closed only Sunday afternoons. That is 19 hours a day, and closing Sunday noon it makes 121 hours a week. One member of the family is on duty all of the time and two during rush hours.

In addition to the work, there is the family to maintain, an apartment to keep, meals to serve, beds to make, laundry, cleaning, social life.

Starting as customers, we have become friends of the Spivacks, and we have been privileged to observe a dogged, gallant undeviating miracle—for this family with the odds much higher against them than seven to five have created a doctor.

His mother says that Morty wanted to be a doctor from the beginning. There was never any defection toward cowboy, soldier, pilot. It was medicine from the beginning. Medicine was simply a fact, an inevitability. The family, the newsstand constituted itself a creative organism. Morty got good grades in high school, but that also was a fact of nature. He did his studying behind the counter between customers.

And then came the time for him to go to college—he went to Cornell. This meant, of course, longer hours for the remaining three except during vacations when Morty took his shift again with his textbooks behind the cash register. They gave him the slacker times when fewer customers interrupted his work.

Then an accident happened. The building changed hands, and the little store ceased to exist. The Spivacks moved their papers to the front of a butcher shop on Third Avenue and held on. It was over a year before they were able to move into another place next door to their old stand. But the process of creation continued uninterrupted. Morty went into premedicine, came home, studied behind the counter. The family functioned. The unit was unbroken.

When Morty graduated from Cornell with honors, it was not unusual. It was inevitable. When he entered Buffalo Medical School, there wasn't much time to sit behind the counter.

You can think of this family as a preset engine aimed at medicine, except that people are not engines. There were debts, worries, illnesses during which the remaining three had to carry 121 hours a week. Everything that happens to people happened to them, weariness, sadness, endless work, sickness—all the matters which stagger people and sometimes destroy them. They did not have to contend with neuroses. They hadn't time—unless you consider what they were doing a neurosis, which it probably is.

The family functioned—the apartment was kept and cleaned, meals cooked, social life, one step at a time, and the time forever. We have known the Spivacks quite a while now, and we have never heard a complaint nor a doubt—and as for self pity, who has time for it?

Recently Morty received his degree in medicine, head of his class, and was awarded A. O. A., and that's about as good as you can get, I guess. He will intern at a New York hospital in his long-ago chosen field of thoracic medicine. It isn't over of course. It never it, but the cards are down.

The family isn't exactly proud because they never doubted that it would be this way—odds or no odds. There's a glow in the newsstand, surely, but it opens at five in the morning and closes at midnight, and if there is any family celebration, it will have to be on a Sunday afternoon.

Perhaps after all the odds were not against the Spivacks. Given the unassailable determination of every unit of this family, an all-wise handicapper might have considered them 10 to 1 in favor. I doubt whether you could beat an outfit like that, short of bombing it. And that is Literature.

John Steinbeck
Author

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MEDICINE AND THE COMMUNITY

. . . The future will see even greater emphasis on disease prevention, maintenance of good health, and effective rehabilitation of the disabled. Technological advances, aided in great measure by new developments in electronics and atomic medicine, will reveal a multitude of facts concerning cardiovascular diseases, cancer, mental and nervous disorders, and various chronic ailments. An increasing proportion of medical services will be provided through clinics, medical centers, and various types of group practice. There will be interesting new developments in the design and operation of hospitals. Voluntary health insurance, if it is not destroyed by government ventures in compulsory health insurance, will solve the problem of medical care costs for all the people of the United States except the indigent. The latter, as always, will be taken care of by private and public charity, and it may be possible that plans for the indigent also will be financed on an insurance basis.

The future of American medicine is bright, if we can continue to work in an atmosphere of freedom, motivated by the dual spirit of enterprise and cooperation. The dominant socioeconomic challenge of the present is to preserve that atmosphere and that spirit.

Gunnar Gundersen
President of the American
Medical Association

AMERICAN CHEMICAL INDUSTRY

. . . Even so, the educational process does not stop when the sheepskin is framed and hung. There is no marking of time or pausing for breath for those people who intend to change things on this world. In chemistry, as in medicine, the "changers" provide something new, something of interest, each day, each week, each month.

A. P. Beutel
Vice-President of the Dow Chemical Company and General Manager of its
Texas Division

SPORTS

K. L. WILSON

Seventy-five years, when regarded statistically as milestones in the career of an individual, an organization, or a publication, such as *The Journal*, suggest venerability and longevity. However, when viewed as a period of development in the many fields of human endeavor, it seems a very short span of time in which to account for so many remarkable accomplishments. Thus, in reviewing the past 75 years of activity in the field of sports, physical education, and recreation, one can only be amazed at the great changes and advancements which have taken place.

A few comparisons of present-day achievements and the standards existing before the turn of the century offer evidence of the tremendous progress effected in the past 75 years. Take swimming, for instance. The world mark for 1,500-meter event was then 29 minutes, 42 seconds; today it is officially recognized at 17 minutes, 52.9 seconds. The winning time at the Amateur Athletic Union (A.A.U.) 100-yard free style national championships in 1883 was 1 minute, 28 seconds, and the currently accepted world mark is 48.9 seconds, with scores of athletes breaking 58 seconds.

Almost every event in the bulky program for track and field competitors is subject to frequent revision in record performances, and comparisons with yesteryear seem ridiculous. High school athletes today, in average performance, surpass the standards which were earmarked as the best in the world 75 years ago.

For the 100-yard dash, the record then was 10.25 seconds; now it is 9.3. The time of 4 minutes, 30 seconds for the mile run was an eye-popper then; now the famed 4-minute mile has become almost commonplace, what with some 18 occasions on which that barrier has been surpassed. A toss of 43 feet was tops in the shotput; now prep athletes can't score unless they hit that distance. Three men in the world have surpassed 60 ft., with the record now standing at 63 ft. 2 in. A jump of 5 ft. 8 in. in the high jump and 11 ft. in the pole vault appeared to be the acme in 1883. Today the world mark in the high jump is 7 ft. 1 1/4 in. and 15 ft. 9 3/4 in. in the pole vault.

Seventy-five years ago, baseball was rapidly becoming the national game. After years of controversy, there began to be some semblance of order in the National League and the American Association (which later became the American League). In 1887, the World Series was most unique—a 15-game schedule, one game in each of 15 cities! From this barnstorming tour resulted $41,000 in receipts. Today the gross receipts from the sale of hot dogs, beer, soft drinks, peanuts, and popcorn alone will well exceed that total in just one World Series game.

Seventy-five years ago, football was just beginning to be advanced. It had been started in 1869, had had a stormy infancy, but was rapidly gaining in popularity in both the colleges and the high schools, although most of the play was confined to the Eastern colleges.

The ensuing years brought many of the star players from the East to the Midwestern and Southern schools, and these men quickly introduced the sport, acting as coaches, sometimes combining that assignment with that of actual participation as players. By 1905, however, the game had become so rough and dangerous that President Theodore Roosevelt issued an ultimatum that if such rough play was not immediately ruled out he would abolish the game. Corrective measures were promptly

taken, and the game of football spread like wildfire throughout the nation. With the introduction of the forward pass and with the little squad of players from Notre Dame that played the great Army team at West Point in 1913, two of the sport's great figures emerged — Gus Dorais and Knute Rockne. These two individuals demoralized the heavily favored Cadets with their forward passing tactics, and Army was beaten 35-13. This great victory lent courage to the small colleges and demonstrated that the forward pass was the "equalizer" which would aid them in competing successfully against larger schools.

Today, football, although it still experiences "growing pains" in some of its concepts, is the great fall sport adventure for millions of Americans who follow the fortunes of their favorite teams with exuberant interest. The speed and skill of the play, the quick reversals of advantage, and the colorful pageantry attendant to the game all have great appeal and vigorously express the American way of life.

It was in 1891, well after *The Journal* had begun publication, that Dr. James Naismith fastened two peach baskets on the rim of the gymnasium balcony at Springfield College and so started the game of basketball. Today, in excess of 100 million spectators are in annual attendance at basketball games throughout America, and the game actually is considered the "national sport" as far as total participation by individuals and teams, along with spectator attendance, is concerned.

Most remarkable in reviewing the past 75 years of sports activity in America is the development of athletic programs in the elementary and secondary schools. Where the adoption of one or more sports came slowly in the early years, and then speeded up during the golden '20's and boomed in the immediate post-World War II era, there now is a mushrooming growth of sports interest and participation so fast and so great that any previous pace seems slow and feeble.

Since 1950, the number of elementary and secondary school children has increased 8,167,000. At the beginning of the 1956-1957 school year, there were 7,820,000 boys and girls registered in grades 9 through 12 in schools in the United States. This year, this total has jumped to 8,424,000—a one-year increase of 604,000 youths reaching the competitive sports age (8 to 18 years of age). The total U. S. school population (kindergarten through college) has grown from 41,366,000 to 43,135,000 for the 1957-1958 school year.

Increased school enrollments have forced many small United States schools to increase both interscholastic and intramural programs, particularly in the sports of basketball, football, tennis, track, and baseball. Nearly 500 million dollars in new facilities for athletics, physical education, and sports are now being constructed—an all-time high. Three-fourths of this plant expansion is in elementary schools, the remainder in secondary schools. In addition, there is an increase of competitive team sports on the junior high level in basketball, football, baseball, and track.

More students mean more sports on the school programs. Large schools are moving toward 30-sport programs, smaller schools toward 20. The biggest gains will be noticed in bowling, golf, wrestling, table tennis, roller skating, skiing, soccer, and tennis.

The phenomenal increase in the nation's 8-to-18-year-old population also has had its effect upon areas other than schools. Virtually every youth sports program initiated in the past five years on the teen-age level has boomed. Youth baseball has jumped from 500,000 participants during the summer vacation period to 2,200,000 last year. Midget football, junior golf and tennis, teen-age bowling, and many other youth activities are just starting to grow.

United States community recreation departments are becoming an increasingly important factor. More than 2,000 communities now boast year-round programs; 5,000 more have part-time schedules. Los Angeles, for instance, has a full-time recreation staff of 1,400 employees and operates over 50 recreation activities, with more than 35,000 youngsters playing youth baseball alone. The same is true of Milwaukee, Wis., San Francisco, Chicago, Houston, Texas, and dozens of other cities.

Winter sports activities also have felt this impact. Skiing, in particular, has never enjoyed so much popularity nor so much individual participation. Interest in skating has increased heavily, also.

There are many reasons why sport and recreational activities have increased so greatly and why standards of achievement in sports have continually risen to higher levels. Better equipment and facilities, of course, have been a great factor. So has the tremendous increase in youth sports-age population, and the resulting participation naturally has widened the base of competition. Public recognition of the athletic achievements also has acted as a spur, and new goals are sought continually as the youth react to the challenge and surpass existing standards.

The spotlight has been thrown on physical education and competitive athletics in a most dramatic fashion in the past two years by President Eisenhower. He appointed a group of experts from many different fields to urge that everything possible be done to encourage the youth of the United States to higher standards of health and competition. The President has pointed out that every opportunity should be afforded to the youth of the nation to participate in competitive sports, that we must not lose the competitive urge that helped make this nation what it is. Leaders in physical education and athletic training have been asked to enlarge their programs and to give training not only to the good athletes but to everyone who can be persuaded to take part.

The impact of this program already has been felt throughout the nation. Hundreds of towns and cities have expanded their schools and recreational facilities and are planning to institute programs where a youngster can compete in his own class. Not every boy can play football or basketball, but every boy and girl should have the opportunity and be encouraged to take part in competitive games of their own choice, where they can not only improve their health by beneficial exercises, but, at the same time, learn the importance of team play and sportsmanship.

Most important, and sometimes overlooked, are the vital factors of improved training and coaching methods which have been aided greatly by medical research and, above all, medical supervision. Today, virtually all school athletic teams from junior high through college have a team physician. Practically no boy enters competitive sports, whether in park recreation contests, Golden Gloves boxing, Junior Olympics, or others, without his undergoing physical tests and having been pronounced able by medical authorities.

Proper diet now means something more than just a way of shedding weight. Every precaution is taken to safeguard the health and welfare of the athlete. Sports in America have made remarkable progress during the past 75 years, and thanks are due to the medical profession for the care and concern it has shown over these years.

K. L. "Tug" Wilson
Commissioner, Intercollegiate Conference
and President, U. S. Olympic Committee

Reprinted from the 75th issue of the *Journal of the American Medical Association* by permission of the editor, Dr. Austin Smith.

MEDICINE AND AVIATION

. . . The intimate relationship between medicine and aviation, however, is most dramatically demonstrated in the preparation we are making to take the tremendous step into outer space. We have, within our technological means, the vehicles in which movement in outer space can be achieved and the instruments through which it can be controlled.

We know that medical science, working hand in hand with technological engineers, can devise the means for adjusting the human being to the elements and the forces which are to be encountered in the progressive adventure into outer space. We know that man is inherently superior to his environment and that the providence which enables us to expand into those elements will enable us to produce the means of protecting human life within that environment.

Edward V. Rickenbacker
Chairman of the Board,
Eastern Air Lines, Inc.

ENGINEERING

. . . The bogey of ill-health is turning out to be largely nutritional; what's called "disease" is just becoming to be recognized as this or that chemical defect, bound to be chemically reversible when the given defect is spotted.

At the same time, the lack of certain key chemicals — vitamins, hormones, minerals, proteins, and others—cuts across the troubles of almost every patient that comes into a doctor's office.

Why are we the healthiest country in the world? In the first place, let's face it, we could be a lot healthier. And in the next place, our family doctors, when they graduate and kick free of the word and formula jungle of their education, are pretty ingenious fellows. The family doctor, wanting to cure sick people, still manages to take what's useful to him, even if he doesn't know its chemical formula.

We ourselves have been fooled by big words that hide the simplest, most fundamental facts. We've spent a great many years on the study of the growth of plants, because that's the whole story of solar energy. Plants have the ability to trap energy from the sun and hold it. That's the way we get our food and fuel and our living and everything else. We hadn't the slightest idea of how it was done. But we did know we could find out if we could do it the way the plant wants to do it—instead of the way we think we ought to do it.

Originally, we thought the plant's great trick was its possession of chlorophyll. We thought we'd made our problem simple by naming the project: "Why is the grass green?" Chemists put on a big drive to discover the chemical structure of this chlorophyll. They solved it, but it didn't give us the answer to how the plants trapped the sun's energy. We looked in the dictionary and found chlorophyll was just the Greek word for green leaf, and we found we didn't know any more about it in Greek than in English.

You'd be amazed at how many things—especially in medicine—are only a Greek or Latin synonym. When we'd dug down beneath that big word, chlorophyll, we found that the supposed mystery of the sun transforming its energy into life turned out to be a rather simple chemical gimmick—the partial reduction of the carbon dioxide in the atmosphere.

A final word on formal education of which we're so proud as the cause of the glory not only of medicine but of all our professions, engineering included. This is what's supposed to be responsible for progress. But real progress is made by those who are quite different from educated people. Facing an inscrutable disease, the men who make progress do so because they tend to throw statistics out the window and start with simple reasoning. They've shaken themselves free of a simple bogey:

From the time kids start kindergarten right on through the time they're examined in medical school several times each year, if they flunk it's considered terrible by the teachers. But an inventor or a researcher or clinical investigator can fail 999 times, and if he succeeds once, he is in. That's the difference between education on the one hand and the invention and research that mean real progress on the other. Our young fellows in the schools get so afraid of that word, failure, that they're scared to start out on their own on anything new.

It would be wonderful if some medical school would install an experimental course where the boys would be taught to fail intelligently. The point is that all schools should teach the simple principles that lead to progress. Just as in industry a successful concern is one that best serves the needs of its customers, so a successful researcher is one who runs errands for the project. And a successful doctor? A real doctor is one who serves his patients.

Charles F. Kettering
Research Consultant and Director
General Motors Corporation

NEWS COMMUNICATIONS

. . . We newspeople had a chance to check up on our own effectiveness in the medical area back in 1948, and I think the figures deserve mention here. On April 29, 1948, ABC radio presented a public affairs documentary, accurately titled, "VD: A Conspiracy of Silence." Breaking a major taboo—with, I admit, some trepidation—we did a program frankly aimed at locating infected individuals, persuading them to come to the clinics, and detailing new, highly successful treatment for veneral diseases. Then we ran a survey on our results.

One clinic we spot-checked reported that 25% of the people who came to it in the following weeks learned of it through our broadcast. In one state, 20,000 cases of syphilis were discovered and cured as a result of "VD: A Conspiracy of Silence."

The revolution in the nation's thinking on mental illness can, I think, be credited in great degree to the mass media. A torrent of newspaper, magazine, radio, and television pieces on mental disturbances have brought us, at belated last, to the civilized realization that insanity is an illness, to be regarded, treated, and, increasingly, cured as such.

The point needn't be labored; examples are legion—cancer, alcoholism, heart disease. It could even be argued that, in the complex and highly septic civilization we have evolved today, if there were no such thing as a news industry the medical profession would have to invent it.

Similarly, this continuing coverage has done an enormous public relations job for the medical profession itself. The "Medical Horizons" series took viewers inside dozens of hospitals, even inside operating rooms themselves; it is hoped that the program had the effect of making both doctors and medicine more comprehensible and less fearsome to the audience. All the networks, all the news media, have contributed to this vital understanding.

Now, I was asked to write a piece on the benefits that news confers on the world of medicine. I cannot end, however, without fervently thanking the medical profession for the one triumph without which the news business as I know it could not exist. Newsmen, of course, have trekked into the most toxic jungles with impunity, shot full of quinacrine (Atabrine). We've wriggled casually across the rusted barbed wire of a hundred war fronts, our blood streams aswarm with invincible tetanus antibodies. We've talked our way through fire, flood, invasion, whatever the Four Horsemen could throw at us, protected only by a press card, an assured manner, and the miracles of modern medicine. But none of this is what I'm talking about.

The triumph I refer to is a miracle drug in the finest sense of the phrase. On its timely appearance in 1899 the entire towering structure of news today depends. Without it the news fraternity would long since have distributed itself in about equal numbers among the less expensive sanitariums, the foreign legion, and the grave.

I mean, of course, aspirin.

John Daly, Vice-President in charge of News, Special Events, Sports, and Public Affairs, American Broadcasting Company

FILM ENTERTAINMENT AND COMMUNITY LIFE

. . . *"Science Will Never Destroy Myth"*

I do not mean to disparage the best in human drama, in myth and timeless fairytale, in stirring legend and heroic adventure. These will never be diminished. The human spirit needs them in every age. Spiritual health requires them.

Walt Disney
Executive Producer and Chairman of the Board of Walt Disney Productions

MEDICINE AND COMMUNICATION

. . . At the time that *The Journal* was born, and for years before, the gap between discovery and communication was tragically wide. Early in the 1860's, for example, Pasteur announced his discovery that microbes could cause the spoiling of meat. We know now that the German physiologist, Theodor Schwann, had made exactly the same discovery a generation earlier, in 1836. This lack of adequate communication within professional circles meant needlessly repeated experimentings and gropings toward knowledge already arrived at and long since demonstrated. It meant that the point of departure of one scientist was far behind the point of arrival of another. It meant that, instead of building on what was already known, scientists spent precious years in rediscovery.

It meant, also, life-wasting delays in the broad application of new cures and preventives to diseases that contributed heavily to the mortality toll everywhere. The death rate from typhoid in 1896, the year that Sir Almoth Wright introduced the inoculation, was 28.3 per 100,000 in the state of Massachusetts, and two years later it had been reduced only to 24.7. On the other hand, in 1954, the year that the Salk vaccine for poliomyelitis was introduced, the death rate for that disease was 0.08, and by 1956 it was cut in half.

As a corrective agency in all this, *The Journal* began where it should have begun and where the need was greatest: in reporting to the entire medical profession in America the major developments in medicine, not only here but all over the world. I do not see how it is possible to over-emphasize this function of professional journalism. Without it, the uncertain dissemination of knowledge from the scientists to the general practitioner would be inconceivably wasteful in its slowness and vagueness.

Today communications within the medical profession are constantly improving. The profession has moved with speed and wisdom in adapting new communications techniques to its special problems and opportunities. In 1953-1954, the American Cancer Society joined with Columbia Broadcasting System (CBS) in a series of 20 closed-circuit color television programs, in seven cities, called the Physicians' Conference on Cancer. The programs were professional seminars, lasting over an hour and a half each, discussing and demonstrating diagnostic, surgical, and medical techniques in the discovery and treatment of cancer. Physicians in seven cities, far too busy to leave their practices to go to distant cities for clinical studies, were able simultaneously to consult with top specialists, to see the progress of treatment of actual cases, to witness operations. Today television recordings of the series are being used in medical schools and hospitals as a teaching aid, making it possible for all medical training centers to share the talents and inspirations of one another's great teachers, surgeons, diagnosticians, and researchers.

Frank Stanton
President, Columbia Broadcasting System, Inc.

PROGRESS FOR THE BENEFIT OF ALL

. . . Law enforcement and the medical profession are more closely allied now than ever before in terms of promoting the public welfare and exerting an influence for good within the community. Together, we subscribe to standards of service which are a challenge to those around us. Individually, our members have proved to be an example and an inspiration for the younger generation to follow.

We in law enforcement today are indebted to the medical profession. During this century of unparalleled progress, we have adopted not only the respect for science but also the personal determination and standards of service which traditionally have characterized the medical profession. I can think of no finer means of our expressing appreciation for these "borrowed" qualities than to use them as a doctor would—for the benefit of all.

John Edgar Hoover
Director of the
Federal Bureau of Investigation
United States Department of Justice

WHAT DOES THE DOCTOR DO? MUCH

WHAT DOES THE PATIENT WANT? MORE

. . . Never, since the initial discussions of it, has socialized medicine had so little appeal in the United States. This is due in part to the depressing reports emanating from European lands where such practice is common, but in much larger part to the eminently satisfactory experience Americans have and have had with medicine in their own country. This sastisfaction, it should be noted, does not go quite so far as to embrace the cost of medical care, because, even with the advent of such organizations as Blue Cross and Blue Shield, American families find the cost of medicine, particularly in the realms of surgery and chronic illness, almost more than they can cope with. But they will cope, in preference to having the federal government participate.

Confidence in medicine is such that the average American family anticipates without any reservation the discovery within the next decade of specific cures for cancer. It might be pointed out, in this area, that, though the general public recognizes the need for constant warning against reported discoveries, it is not always convinced that such extreme caution as exists is altogether justified. As long as quacks are properly disposed of—and the public naively assumes that exposure is quick and sure—there is a conviction that advances in the treatment of cancer should be reported more fully and even more optimistically in the lay press. The public's attitude is, "What is wrong with hope?" and, "Who is harmed by it?".

It should not suprise the leaders of medicine to hear that fear of mental illness is beginning to approximate the fear of cancer. The continuing campaigns to bring about more hospital facilities for treatment of the mentally disturbed, coupled naturally enough with repeated publication of the almost unbelievable number of persons requiring treatment, have brought into being a complexity that simply did not exist in the average mind at the beginning of the century. "But American medicine will take care of it!" "Already we have dozens of different tranquilizers that are helping to do the job!" Such is the course of the thinking of Americans—of practically all of them.

As I have indicated already, doctors have given the people a greater life span—more time for themselves. What do the people, the "consumers" of medicine, want now? They want more of the doctor's time! It is their one, their only, to all intents and purposes their exclusive, important complaint: "Doctors are too busy; we are no sooner ushered into their offices than we are ushered out; we'd like to talk more, to tell them more; we'd like them to explain more; to listen more."

It is an interesting commentary, but medicine has brought this on itself. Perhaps it is part of the penalty of the faith medicine has engendered. It is, in any event, not a cheerless penalty. Most other professions would suffer it gladly.

Herbert R. Mayes
Editor of *Good Housekeeping*

THE DOCTOR AND THE AUTOMOBILE MANUFACTURER

. . . One of those who thought about this was the late Dr. John J. Prendergast, medical director of Chrysler. Dr. Prendergast got to wondering about the ability of people who had recovered from tuberculosis to perform satisfactory work. With the support of Chrysler management, he embarked in 1938 on a program to make chest x-rays of new employees. He added to his staff an expert on internal medicine and pulmonary diseases, Dr. Marion W. Jocz, and arranged for the assistance of a leading x-ray expert, Dr. Carl C. Birkelo.

During a five-yeard period, more than 300,000 physical examinations, including chest x-rays, were made by Chrysler doctors. Altogether, more than 3,000 persons

were found to have active or inactive pulmonary lesions—many of them being unaware of this until they applied for work in Chrysler plants or reported for a physical examination after an absence from work due to illness.

Out of these studies came a number of conclusions important to the automobile industry and to the medical profession as well. Among them, for example, was the knowledge that employment of persons with certain types of inactive pulmonary tuberculosis lesions is practicable. As the doctors said in their formal report, "the usual conditions of employment in a highly mechanized industry do not constitute a threat to the health of such persons or to their fellow employees," and "the work record of these persons appears to be as good as that of other groups of physically substandard employees."

The formal results of this program were not published until 1948, but preliminary findings proved of immense value to the automobile industry during World War II. Young, physically fit men were entering the armed forces, and most applicants for employment in the plants were those unsuited for service because of age or because of various physical and other defects. Applying knowledge gained in the tuberculosis study, the doctors found that many people who in the past might have been denied work because of "physical handicap" could perform excellent work if they were assigned to an appropriate job. A man who could not see well close-up would not be suited for an inspector's job, but he might handle a jitney with great expertness. A man who could not do heavy lifting could operate an automatic machine or run a power lift. As Dr. Max Burnell of General Motors has said, automobile industry doctors concluded that "everyone is handicapped for some kind of work."

L. L. Colbert
President of the Chrysler Corporation

LIFE INSURANCE AND THE MEDICAL PROFESSION

. . . At the end of 1957, the number of persons estimated to have some protection against hospital expense was 123 million—probably more than the number covered by life insurance on that date. A year earlier, the figure was 116 million, but in 1940 only about 12 million were so protected. With some duplication, in 1956, 101 million were covered by surgical expense insurance (only 3 million in 1940) and 33 million were insured against loss of income resulting from sickness or accident. All of these persons are protected by private plans, furnished by private American enterprise.

In view of the great number of persons covered by these forms of insurance and particularly in view of the rapid rate of growth, there would seem to be little justification for a revival of plans for government to enter these fields. If that should come to pass, the socialization of medicine might well follow. We have only to look at England, or at Ontario, Canada, to see what could happen here. On Jan. 1, 1959, residents of Ontario will be covered by a compulsory plan of hospital care insurance. If they want ward care, they must get it under the government plan and not through the private insurance companies; these are to be limited to providing insurance covering the difference between ward care and private or semiprivate accommodations and certain other benefits. Surely the medical profession shares with the life insurance business the desire and, indeed, the duty to do all that is reasonably possible to prevent this sort of government expansion and interference; it could lead to government control of insurance and medicine.

In the future, as in the past, the medical profession and the life insurance business will continue to be closely allied; both will continue along the paths of dedicated service to the American people.

Frederic W. Ecker
President of the Metropolitan
Life Insurance Company

GOOD MEDICINE FOR INDUSTRY

. . . There is another relationship between industry and medicine that has grown rapidly in the last two decades. I am told that over 100 million people in the United States now have some form of prepaid hospitalization insurance. Prepaid coverage of other aspects of medical care has also been growing rapidly. A significant majority of this represents coverage through industrial group insurance plans. In most of these plans industry pays a part, usually half, of the cost. This is true in my company, where the group insurance plans are designed on the 50-50 principle. Last year, employees of this company or their families received $32,400,000 for benefits other than life insurance under these plans, and a major portion of this amount was directly related to doctor and hospital bills.

One can foresee an increasingly close relationship between medicine and industry. New technology will produce new potential health hazards that will need to be evaluated and controlled. But perhaps even more significant is the recognition of the importance of the individual in the production scene. Not only is physical well-being important to full, individual productivity, but mental health as well. We are aware of the impact of emotions on safety and production and of the problems that interpersonal relationships in industry can produce. Doctors are unique in that their entire career is devoted to the study of the individual. One of the functions of the physician is to assist his patient in understanding himself and his relationship to others, in understanding his motivations and his reactions to his environment. The physician is a logical source to turn to for assistance in the search for mental health in industry.

Industry also needs from the medical scientists knowledge of the degenerative diseases and cancer, which daily take their toll at all levels in the industrial structure. Superb progress has been made in the prevention and treatment of infectious diseases. But the coronary attack continues to fell men whose talents and experience are so valuable. It is the fond hope of all that we will one day understand these processes and know how to prevent them. This hope is supported by the great strides in medical knowledge in the recent past.

This progress augurs well for the future and points to an increasingly close relationship between industry and medicine. We should see to it that such relationships carry full recognition of the dignity of the individual, and have as their single goal the health and well-being of industrial America.

Roger M. Blough
Chairman of the Board of the
United States Steel Corporation

MEDICINE SERVES THE COMMUNITY

. . . On being asked to contribute an article for this 75th anniversary issue of *The Journal* of the American Medical Association, I at first had some doubts. What, I thought, does a merchant have to say to men who are devoting their lives and their energies to medical science? Have the two fields, medicine and merchandising, shown any parallel development in the past three-quarters of a century? Is there any common ground, any valid basis for comparing the two fields?

In seeking answers to these questions, I soon sensed that we do indeed have at least two important circumstances in common: 1. Each of our fields is concerned with serving basic human needs. People expect us to be there when they need us, and they count on us both to supply whatever they may require at any given time. 2. In medicine, as well as in merchandising, the past 75 years have been great years, highly significant in the far-reaching developments that they have brought.

Fowler B. McConnell
Chairman of the Board,
Sears, Roebuck & Co.

MEDICINE AND THE LEGAL PROFESSION

. . . Certainly in this area of scientific development, the great medical profession need bow to no one. Over the past 20 or 30 years medical contributions to the health and welfare of our people through careful research have been magnificent. That this is true is clearly evidenced by the fact that miracle drugs, lifesaving vaccines, and new types of equipment have become household words even for the man on the street.

However, in this anxious, hurried era in which we live, no profession can be satisfied to make its advance solely in the area of the physical and the material—men who are dedicated to public service must go further and insure that our respective professions make equal progress in the area of human relations and social development. For certain it is that the most difficult problems confronting mankind are in the realm of human behavior. Doctors, lawyers, educators, ministers, sociologists—all must pool their resources and their experience to work out the best solutions for the benefit of the public.

The medical profession has a magnificent record of achievement. Its contributions to the over-all welfare of the community are acknowledged by man in every field of activity. But this great past record increases its responsibility for future service, for the public has become dependent on its leadership. The challenge is clear, and it exists for all professions dedicated to public service. We in the legal profession are ready and look forward to joining with members of the medical profession in continued and expanded joint effort for the advancement of the welfare of the nation and of the world.

Charles S. Rhyne
President of the American Bar Association

The Twenty-Eighth Annual Conference

of the

OKLAHOMA CITY CLINICAL SOCIETY

October 27, 28, 29, 1958

Biltmore Hotel **Oklahoma City**

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REPORT *from* DEAN EVERETT

During the year improvement in the organization of medical center institutions continued with emphasis on relations of the University Hospitals to the teaching programs, and the development of instruction at the Veterans Administration Hospital.

The School of Medicine Departments of Pathology and Pediatrics were reorganized, and those of Dermatology and Otorhynolaryngology were strengthened. Certain minor courses in the clinical years were consolidated with major courses to improve the evaluation of medical students. There were about 250 applicants for the entering medical class. Selections were made by the Admissions Board after interviewing all applicants that met minimal requirements. The methods of interviewing were improved. The graduating class established a high record of first choice appointments to internships.

The medical school teaching program was assisted by 16 training grants awarded by the Kellogg Foundation, the National Institutes of Health, and several state agencies. The grants were to improve instruction in arthritis, biostatistics, cancer, heart disease, neurology, pediatrics, physical therapy, preventive medicine, psychiatry and surgery. This financial assistance (approximately a quarter million dollars) was developed through the initiative of faculty members who conduct the programs. The National Fund for Medical Education and the American Medical Education Fund continued their unrestricted support, and the former gave an additional grant to evaluate the curriculum of the School of Medicine.

Approximately 100 residents and interns were enrolled in clinical graduate training programs. Progress was made in the integration of residencies with the affiliated hospitals, particularly with the Veterans Administration Hospital. A record office for residents was established to assist the clinical departments.

A serious need for graduate assistant stipends remained unsolved, but 59 graduate students enrolled in basic sciences Graduate College programs at the medical center, and seven Ph.D. degrees and five M.Sc. degrees were awarded.

Seven major postgraduate courses and a series of ten shorter courses for physicians were held at the medical center. More than 1,400 physicians (including 167 from other states) registered, representing an eight per cent increase over the past year. The postgraduate courses had the complete support of the clinical departments. Members of the basic science departments participated in a new training program for house physicians at Hillcrest Hospital, Tulsa.

Research in the medical center increased steadily in numbers of projects, personnel, and grants received (largely from private foundations, voluntary health organizations, and the National Institutes of Health). The Research Committee of the School of Medicine assisted in developing a special medical center section of the *Oklahoma State Medical Journal* to portray research interests and accomplishments at the Medical Center. The need for additional laboratory space has become crucial. While the school was fortunate in receiving $400,000 con-

struction grant from the National Institutes of Health for this purpose, the state has not provided the necessary matching money to date, and the grant will lapse in February 1959.

The School of Nursing initiated its new baccalaureate program for nurses having certificates, and the W. K. Kellogg Foundation made a generous grant for the development of this program over a five year period. A director of the program was secured. Some progress was made in securing members of the faculty with specialized qualifications, but low salaries continued to pose a problem. Present plans include seeking a grant to improve instruction in psychiatric nursing. The number of students interested in the baccalaureate program increased. During the year the teachers from the nursing service of the University Hospitals were included in the clinical faculty. Plans are being made to incorporate the records of student nurses into a medical center record office.

The School of Physical Therapy, established in 1954, has had 21 graduates to date. The number of applicants is increasing. Two teaching grants have helped in the development of this school.

Brevity prevents reports on other technical schools, but there were almost 2,000 students enrolled in the various medical center programs during the year. Serious consideration needs to be given to providing the students with housing, eating, and recreational facilities as at other colleges and universities.

At the University Hospitals, after months of delay required to complete arrangements with professional groups and state agencies, a 30 bed unit was reopened in May for the care of children who are clients of the Department of Public Welfare. An additional operating room for this service was developed with the aid of grants from the Oklahoma Commission for Crippled Children and the Oklahoma Society for Crippled Children. An assistant superintendent was placed at Children's Memorial Hospital to coordinate activities there. Plans are under way to provide the much needed clinical laboratory at that hospital.

During the year the director of the Social Service Department of the University Hospitals arranged 37 conferences with county commissioners, welfare personnel, and health officers in cities and towns throughout the State. These meetings helped to dispel a widespread lack of knowledge concerning the obligations and limitations of the University Hospitals in the field of medical care. It is planned to continue such information through the county medical societies.

The hospital addition under construction will provide space necessary for the Department of Radiology. The Donner Foundation has contributed equipment for supervoltage cancer therapy. The isotope laboratory has been incorporated into the department. There is a major problem ahead to replace the hospital's outmoded and deteriorated general x-ray equipment. The top floor of the new addition will provide laboratories and quarters for several clinical services.

During the year progress was made in correlating the work of the clinical departments of the School of Medicine with that of the general hospital services, but much remains to be done to modernize future medical center operation. Facilities at the University Hospitals need improvement and expansion to meet the needs of the clinical departments. The recent Governor's Committee on the Medical Center recognized this requirement and recommended construction of a new large hospital unit to connect the two existing hospitals. Other buildings planned to correct serious deficiencies include the research laboratory, a warehouse (for efficient purchasing and storage), modern animal quarters, student housing, and a postgraduate center, together with land acquisition.

Most important for the immediate future are measures to increase the present unfavorable salary levels for faculty and employees, and a method of assuring a realistic and stable income for the University Hospitals.—Mark R. Everett, *Dean*

DELAYED NECROPSIES *of Historical Interest**

ALLAN A. KATZBERG, Ph.D.

"The pursuit of any branch of knowledge for its own sake does not need justification."—Herbert Williams

The ever restless mind of the paleobiologist often probes about in the most unexpected places. Not satisfied with the study of mere contemporary living material, it attempts to wrest secrets from the long gone past. Thus we may find on one hand a paleobiochemist who has extracted certain amino acids from fossil materials dating back 500,000,000 years, while on the other hand a paleoserologist has been able to obtain definitive serologic reactions of blood types in the skeletal remains of humans of 10,000 years ago.[1]

The term *paleopathology* was coined by Ruffer[5] in 1913 and it was defined as the science of disease which can be demonstrated in human and animal remains of ancient times. This science has proven not only fascinating but it also offers some hope that it might help to explain certain modern diseases and perhaps also trace back certain infections to their point of origin.

Just where in time it would be best to begin this study is not easy to define, nor is it important, and so we shall progress from relatively recent times toward the more ancient eras.

As a beginning let us spend a few moments as we consider the interesting case of John Paul Jones,[3, 11] the man that we remember as the founder of the United States Navy. A Scotsman by birth, he "fit the redcoats" during our revolutionary war from the decks of the Bonhomme Richard, a French East Indiaman. After our independence was achieved, he asked Congress to remunerate him for certain prizes which he had seized on the high seas. The argument that he received reminds us of the one issued by the bourgermeister of Hamlin to the Pied Piper. So John Paul left in a huff, sailed for Europe, and never saw the United States again. In time he even became an admiral of the Russian Navy. His insatiable "joie de vie" took its toll on youth and health. He settled in Paris, developed nephritis, which was complicated by an earlier siege of pneumonia, and he died in 1792 at the age of 45. His body was embalmed in alcohol and placed in a coffin of lead.

One hundred and thirteen years later, in 1905, his grave was found and his remains resurrected. Some patriotic Americans, plagued by pangs of conscience, imported his remains to this country under escort of U. S. warships and, in an impressive ceremony at Annapolis Naval Academy, his body was placed on two wooden sawhorses where it remained for the next seven years. Of course prior to his departure from France careful identification was made. On opening the casket a heavy bouquet of alcohol, well aged in lead for 113 years, greeted the nostrils of the investigators. The facial features were almost unchanged when compared to a bust sculptured of him in life. The internal organs were well preserved. The left lung showed scars from a siege of pneumonia three years prior to his death. The liver was normal though a little shrunken. The spleen was large and firm. Histological examination showed that the stria-

THE AUTHOR

Allan A. Katzberg, Ph. D., graduated from the University of Oklahoma in 1956. He is Assistant Professor, Department of Anatomy, University of Oklahoma Medical Center.

Doctor Katzberg is a member of the American Association of Anatomists, the American Association for the Advancement of Science, the New York Academy of Science and Sigma Xi.

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tions of cardiac muscle were preserved while hepatic cells had deteriorated. The blood vessels of the kidneys were sclerotic and glomeruli were partly fibrosed. Bacteria were present in the liver and kidneys. A diagnosis of chronic interstitial nephritis was made and this was consistent with history in that he had dropsy for a week prior to his death. While this is often stated to be the most delayed autopsy that was ever performed, the literature indicates some that even exceed this period.

Another interesting case is that of Don Francisco Pizzaro,[11] whose remains were exhumed in 1891 on the three hundred and fiftieth anniversary of his assassination in Lima, Peru. Although no embalming had been done, many of the tissues of muscles, tendons, blood vessels, as well as the right eye were identifiable. The visceral organs were very deteriorated. The stab wounds which caused his death were located on the right side of the neck.

Skeletons of the Swedish stone age dating to 2000 B. C. up to the relatively recent Viking period of 1000 A. D. have been studied.[11] The state of preservation of these skeletons was very good especially where interment had been carried out in dry gravel beds.

King Olav Gierstadaalv of the Icelandic tradition of the 9th century had been described in life as a tall man with a diseased leg. A great mound built at his direction yielded a tall skeleton with one foot and knee badly deformed by rheumatoid arthritis.

While no soft tissues of these Norsemen survived, articular cartilages were well preserved and even included remnants of chondrocytes in the lacunae. Histochemical studies made by staining with tolvidine blue produced the typical metachromasia associated with cartilage and the presence of polyester sulfates. The bone marrow showed some cellular elements of the hemopoietic series. The haversian system showed blood vessels with only the intima missing and still containing red and white blood cells. In the bony matrix osteocytes and canaliculi were discernable. Decalcified bone showed collagen bundles in the typical pattern. No relationship between the degree of preservation and historical age could be established.

These long delayed necropsies have revealed a great variety of ailments and injuries as well as a variety of attempts at treatment. Cases of cretinism, hydrocephalus, rickets, arthritis, osteoporosis, and ankylosis have been identified. Some evidence would place the presence of syphilis in Gallo Roman times. This of course is quite contrary to the general concensus that this was a disease which originated in the Western Hemisphere. Fractures, imbedded flint arrowheads, and cases of death by strangula tion have been found, as have bandages on Peruvian heads and splints on Egyptian limbs. The description of the bodies of 100 men executed by hanging in Nubia in Roman times showed a variety of terminal results.

Trephening, believed to help evil spirits escape and so cure such ailments as epilepsy, insanity, and ordinary headaches, was practiced with marked success in Peru, that is, success at least as far as surgical skill was concerned. Skulls have been found with gold plates healed in position; however, cotton sutures have been found in the scalps of bungled jobs.

Evidence of parasitic infections has been observed. Trichinosis was seen in Egyptian embalmed cats as well as in humans. Schistosomiasis was common in the Egypt of 1250 B. C. as was small pox, while polio was traced back as long as 3400 B. C. Evidence of tuberculosis in Egypt was found in mummies of 2700 B. C. Lung ailments also included anthrocosis, silicosis, and emphysmea. Bone diseases such as osteoporosis and osteomas were not rare. Dental caries were very common. Blood vascular diseases as arteriosclerosis also sped many an Egyptian to the vats of the embalmer. On the other hand, rickets seem to have been rare. Gram negative bacilli were found in abscesses and in the case of a Greek mummy, a bacillus resembling that of plague was harboured in the lungs.

Other organic ailments diagnosed were prolapses of the rectum, intestine, and va-

gina, and cases of appendicitis, cirrhosis of the liver, gall stones, and renal calculi.

Of special interest to obstetricians is the case of the young Princess Hehenit of the Dynasty, who died in childbirth. The difficult labor produced by a narrow pelvis caused a vesicovaginal fistula and thus her death. Another mummy from a Coptic cemetery was that of a negress who died in childbirth and showed the infant's head firmly wedged in the narrowed pelvis.

The method employed in embalming had much to do with the preservation of the histological architecture of the soft tissues. In the early predynastic Egyptian period 5500 years ago, drying was the principle method. Later as more skilled type of funeral directors evolved all the latest accessories and inovations were provided. Generally the brain was aspirated through a tube forced up the nose and through the cribriform plate. All the viscera except the heart was removed from the body via an abdominal incision and buried with the body in a special canopic jar or chest. The body was soaked in brine for some 70 days, the abdominal cavity filled with cloth, mud, sawdust, or plain rubbish, and then wrapped in linen bandages.

Peruvian mummies for the most part were preserved by drying either cum or sans viscera, generally cum. The prinicple preservatives employed were Balsam of Peru, menthol, salt, tannin, alkaloids, saponins, cinnamic acid, and various resins, but chiefly the dry atmosphere.

The major difficulty encountered in paleohistology is the preparation of sections suitable for microscopy of tissues that had become hard, dry, and often very brittle. The first studies were done by Czermack in 1852. He placed tissues of Egyptian mummies in caustic soda and teased them out sufficiently to leave behind some drawings for the perusal of posterity.

Wilder in 1904 softened tissues with a 1 to 3% caustic potash solution and then checked the process by transference to 3% formalin. Shattock (1909) made frozen sections of Pharoah Merneplah and demonstrated calcareous changes. Ruffer[5, 6] pioneered with modern histological techniques on such material. He softened the brittle tissues in sodium carbonate.

Wilson (1927) used Ruffer's technique on the dessicated remains of basket makers of early America. Shaw (1938) employed modern staining methods to the canopic remains of 18th Dynasty mummies. Graf in 1949 used 1.2% saline solution followed by 4% formalin and found that connective tissue stains produced best results.

A. T. Sandison (1955)[7, 8] had marked success in preparing tissues that have usually turned dark brown or even black and very brittle. He placed it in a softening fluid of

3 parts 96% ethyl alcohol

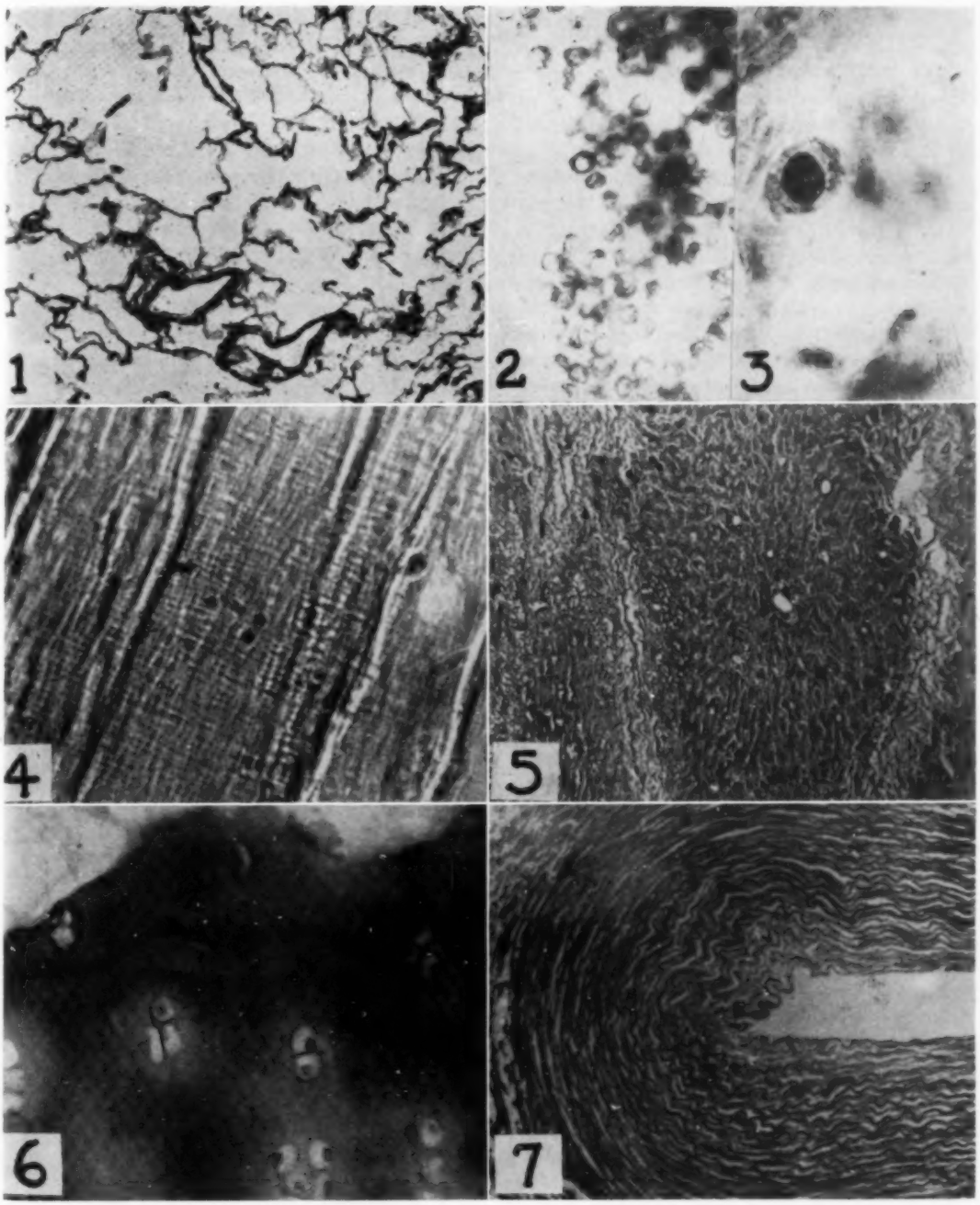
5 parts 1% Ag. formalin

2 parts 5% Ag. Na_2CO_3

Almost immediately a brown color diffuses from the material into the fluid and as it is heavy it sinks to the bottom. This is continued for several hours and maybe overnight. The tissues become transparent, soft, and almost jellylike, and are gradually dehydrated and infiltered with paraffin. He was able to section it at 3 micra.

Many conventional staining methods have been applied—H and E, Mallory's, V. Giesons, Verhoefs, orcein, toluidine blue, phosphotungstic acid, hematoxylin, periodic acid Schiff (PAS)—with good success, and these have revealed fine detail in many tissues, such as cross striations in muscle, elastic tissue of media of large arteries, and all constituents of skin. Cartilage, both articular and trachial, was the only tissue to give a positive PAS reaction, while follicular membrane of thyroid gave the Prussian blue reaction for iron.

Williams[10, 11] reports on a mummy bundle from Lima dated at 700 A. D. and describes spinal osteo-arthritis which has been found common in mammals of the Pleistocene period, such as the cave bear, and continues today. I have examined some of the skeletons at Fort Ancient, Ohio, dating back to 1000 A. D., in which the only vertebrae



1—Lung of Egyptian mummy of 1500 B. C. showing two blood vessels and preserved alveolar architecture. Aniline blue stain, x100—after Shaw.

2—Red Blood cells of Haversian canal from bone of Viking period. Haematin stain, x1000—after Graf.

3—Bone marrow cell from Viking period. Picro fuchsin and haematin stain, x1200—after Graf.

4—Skeletal muscle from Peruvian mummy, 700 A. D., showing cross striations. x400—after Williams.

5—Liver of Egyptian mummy of 1500 B. C. showing lobule with central vein and cell columns and sinusoids. H & E, x120—after Shaw.

6—Articulating cartliage of carpal bone of Egyptian mummy. PAS stain, x400—after Sandison.

7—Carotid artery of Egyptian mummy stained with Verhoef's van Gieson fluid. x30—after Sandison.

which were unfused were the cervical and upper thoracic region.

Williams examined the black hair and scalp of the Peruvian mummies and found no indications of pediculus humanis capitis, which indicates their effective sanitary efforts or else that this was solely an old world affliction. The limbs and diaphragms and associated veins, arteries, and nerves were dissectable in these mummies, the cornea of the eye was preserved, but the nucleii of the cells did not stain. The skin was best preserved between the digits. Tattoo marks were visible on the body, and in basket makers, fingerprints and toe prints could be made. Adipose tissue was identifiable. Bacteria were demonstrated with methylene blue. Precipitin reactions for human serum found positive in materials obtained from Egyptian mummies were negative in Peruvian mummies.

Chemical analysis of Egyptian brain material from 4000 B. C. to recent times showed compounds of nitrogen and phosphates and cholesterol. The latter was present in all, but its quantity decreased with the age period of the mummy.

Coptic bodies from the 5th and 6th century A. D. showed the organs still in situ as the bodies were unopened and preserved merely by covering with salt. The skin was well preserved but the internal organs underwent much destruction. Crystals of fatty acids were abundant in the peritoneal cavity, particularly about the liver. The fore brain and meninges were preserved and some convolutions were recognizable. The hind brain and spinal cord were destroyed, as were the ovaries, uterus, adrenals, and lymph nodes. The lungs were shrunken but the alveolar structure was retained. Striations were preserved in cardiac muscle fibers. Columnar epithelium was retained in glands. Liver cells were distinct. In the spleen and testes only the connective tissue architecture was seen. In the kidneys the pattern of tubules and glomeruli was evident.

In conclusion let us consider the Moorleichen or Bog Bodies, which are generally believed to be those of strangled criminals. These are still occasionally exhumed from the sphagnum bogs of Europe. Some of these are believed to date back 2000 years. The acids of the swamps decalcified the bones and dissolved the sarcoplasm of the muscle, but the hair, nails, connective tissue, and cartilage is well preserved. The brain in some cases showed cholesterol. The architecture of the gall bladder, G. I. tract, and papilla of tongue was demonstrable. Very little cell structure prevailed. Collagen was well preserved but elastic tissues not. Blood cells persisted in vessels, but structures such as the axis sylinders of nerve fibers had disappeared.

Much additional material could be presented in this review of a subject somewhat peripheral to our immediate interests and still with the capacity to stimulate our thoughts. Perhaps the principle value of a study of this nature is that it acts as a gauge with which we may measure the great advance of civilization, particularly in the realm of medicine. At the same time our pride may be tempered with a feeling of inadequacy as we realize that many of our present-day ills date back through the ages and still we seek a remedy for them.

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800 N.E. 13th Street, Oklahoma City, Oklahoma

The Deleterious Effects of

ADRENOCORTICOIDS IN TUBERCULOSIS

Report of Three Cases

HAROLD G. MUCHMORE, JACK D. WELSH** and CHARLES M. HARVEY****

Current issues of almost every medical journal devote a few pages to the beneficial effects of adrenocortical steroids. The development of new corticoid derivatives and their combination with other agents has widened the range of major and minor conditions in which these drugs are recommended and used. The adrenocortical steroids, like many other drugs, have undesirable actions which complicate their use. The purpose of this paper is to re-emphasize one of the complications.

In 1950 it was noted that adrenocorticotropic hormone given to patients with pulmonary tuberculosis might produce an initial subjective improvement;[1] however, there might also be a concomitant spread or reactivation of the disease.[2, 4] Some investigators believe that the combined use of antituberculosis drugs and steroid therapy may improve the pulmonary lesions in individuals with recognized tuberculosis.[5] However, adequately controlled studies have not been performed. The greatest hazard is to the patient with unrecognized or inactive tuberculosis who may have progression or reactivation of the disease while receiving adrenocortical steroids for an unrelated condition.[6, 9] Three patients were seen recently at the Oklahoma University Medical Center in whom the activation of their tuberculosis was apparently related to the administration of adrenocortical steroids.

Case Reports

Case 1: A 32 year old white woman first entered the Oklahoma University Hospital on January 10, 1955, with the chief complaint of recurrent right lower quadrant pain during the previous two or three years associated with irregular menstrual periods. Past history was pertinent in that the patient had spent three months in a tuberculosis sanatroium in 1948. Records obtained later from the sanatorium revealed that she had been observed because of a minimal infiltration in the upper lobe of the right lung. Her diagnosis was tuberculosis of the lungs, minimal, probably active. However, she did not receive treatment. Sputum and sputum concentrates were negative for acid fast bacilli on smear and culture. X-ray films of the chest showed an infiltration on the right upper lobe. Follow-up x-ray films at the sanatorium in the latter part of 1948 showed clearing of the right apical infiltrate. A later film in August of 1949 showed no x-ray evidence of active lung disease. A chest x-ray obtained seven months prior to the present admission showed only a minimal fibrotic lesion in the right apex. Physical examination at the time of admission revealed a pelvic mass thought to be a uterine leiomyoma, and some increased skin pigmentation. On January 12, 1955, under general anesthesia, a total abdominal hysterectomy and a right partial oophorectomy were performed for leiomyomata. The day after surgery the patient developed fever and three days after the surgery she went into shock. She appeared moribund, and respirations were shallow. Acute adrenal insufficiency was suspected and she was given corticosteroids and vasopressors. She received levarterenol intravenously, 12 mg. a day for two days. Hydrocortisone was given intravenously, 100 mg. the first day and 200 mg. the second. In addition she was given oral

From the Medical Service, Veterans Administration Hospital, Oklahoma City and the Department of Medicine, University of Oklahoma.

*Clinical Investigator, VA Hospital, Asst. Professor of Med., Preventive Medicine and Public Health.

**Trainee, National Institute of Arthritis and Metabolic Diseases.

***Instructor of Medicine.

cortisone acetate, 50 mg. the first day, 200 mg. the second, 150 mg. the third, 50 mg. the fourth and fifth, 37.5 mg. the sixth; 25 mg. seventh through the fourteenth days; and 12.5 mg the fifteenth plus 40 units adrenocorticotopic hormone. A chest x-ray film on the day corticosteroid therapy was instituted showed an irregular area of density in the right base. Blood cultures were negative. A further progress film of the chest five days later showed an irregular area of infiltration in the left midlung field. Penicillin therapy was instituted with an improvement in the patient's condition and she was discharged on 1-30-55. However, diarrhea immediately developed and she was re-admitted to the Medical Service on 2-2-55. There was almost complete clearing of the pneumonic process except for an irregular area of infiltration in the right base with small radiolucencies suggesting cavitation. Acid fast bacilli were seen in sputum smears. She was begun on streptomycin and para-aminosalicylic acid therapy and transferred to a tuberculosis sanatorium for further therapy.

Case 2: A 34 year old white man was admitted to the Oklahoma City Veterans Administration Hospital April 8, 1956, with complaints of malaise and hemoptysis. In April 1955, while in northern California, he developed malaise, fever, and a hard shaking chill. At a county hospital in this area, he was found to have a right upper and right lower lobar pneumonia with blood cultures showing growth of pneumococci. He was in shock and appeared moribund. Penicillin was started for the pneumonia and cortisone acetate because of his shock. He received 300 mg. of cortisone acetate daily for three days, 200 mg. for the next three days, and then 100 mg. the seventh day when he was transferred to another hospital. During this hospitalization his penicillin was continued. In addition he received cortisone acetate 50 mg. for two days, 37.5 mg. for three days at which time it was discontinued and he was given 10 units of Acthar jel. He appeared to be convalescing satisfactorily although rales persisted over the right lung field posteriorly. On admission a chest x-ray film showed a rather extensive right midlung infiltrate and a small infiltration in the left lung was seen. As the pneumonia cleared, there was slight, but definite, increase in size of the shadow in the left lung. The patient was discharged after 30 days having showed marked clinical improvement. Sputum cultures were later reported positive for acid fast bacilli and an attempt was made to locate the patient. This was not immediately successful because of his propensity for wandering about the country. From October, 1955, to April, 1956, he was anorexic, had shortness of breath on exertion, and intermittent episodes of hemoptysis. When he was finally admitted to the Oklahoma City Veterans Administration Hospital, the physical examination was normal. However, the chest x-ray showed a moderately advanced nodular infiltrate in the left midlung field. Repeated sputum smears and cultures were negative for acid fast bacilli. He was then begun on isoniazid (INH) and para-aminosalicylic acid (PAS). On this regimen there was a steady regression of the lesions in the left lung, over a period of four months and x-rays were stable for six months.

Case 3: A 59 year old white man was admitted to the Oklahoma City Veterans Administration Hospital November 7, 1956. Although extensively deformed and disabled by rheumatoid arthritis beginning in 1938, his primary complaint was increasing difficulty in starting the urinary stream during the month prior to admission. Previous arthritis treatment was of various types, extensive and ineffective, including about 50 injections of cortisone in 1950. Pain in the dorsal spine, sacrum and legs associated with a progressive kyphoscoliosis began in 1955. At the time of hospitalization, physical findings were consistent with a high spinal cord lesion. Spine x-ray films showed degeneration and wedging of several dorsal and cervical bodies and a myelogram showed a complete block at the level of the fourth thoracic vertebra. A chest x-ray film at the time of admission showed increased lung markings bilaterally, but no definite infiltrate was present. Pain in lower trunk and legs became more severe, bladder function disappeared completely and patient showed progressive loss of motor control of legs. A cervical laminectomy January 3, 1957, for spinal cord decompression disclosed that the

cord did not pulsate below the level of the fourth cervical vertebra. Apparently the damage was produced by the extensive arthritic degeneration; there was no evidence of any other process.

At the time of surgery, cortisone, 60 mg. daily, and adrenocorticotropic hormone, 80 u. twice weekly, were begun. The cortisone was continued in decreasing dosage until January 25, 1957, with a total dosage of 1,370 mg. A total of 530 units of adrenocorticotropic hormone was given, the dosage decreased step-wise and discontinued on February 4, 1957.

The post-operative course was stormy and febrile, complicated by a marked increase in urinary symptoms. Aerobacter aerogenes was recovered by urine culture. Despite many antibiotics, pyelonephritis of varying severity persisted throughout the remainder of the hospital course, and subsequent urine cultures showed growth of Proteus rettgeri and Pseudomonas aeruginosa. Fluid balance and electrolyte disturbances offered additional post-operative complications. On February 4, 1957, a chest x-ray film showed a pneumonic process in the right lower lung field, but blood and sputum cultures at this time were sterile. Temperature became normal on February 11, 1957, and with the appearance of plaques of Candida albicans on the oral mucosa, all other antibiotics were discontinued and nystatin was given for 14 days, with apparent improvement. The possibility of pulmonary candidiasis could not be proved. The right lower lung field infiltration disappeared, and on April 9, 1957, a chest x-ray film showed a small nodular infiltrate in the right upper lung field. Serial chest x-ray films showed progressive enlargement of this lesion. Many cultures of gastric washings and sputum failed to yield growth of tubercle bacilli, except for two positive cultures obtained May 13 and 16, 1957. Isoniazid, 300 mg. daily, was begun on July 10, 1957. No other positive cultures were obtained.

The persistent pyelonephritis of varying severity continued to be the most serious problem, and resisted all treatment, probably because of the cord bladder. The hospital course was progressively downhill with recurrent electrolyte imbalance, low-grade anemia, pyuria, proteinuria, and persistent high fever. The patient died on August 10, 1957.

An autopsy revealed bilateral chronic pyelonephritis. There was no evidence of renal tuberculosis. The lesion in the right upper lung measured 3.0 x 3.5 cm. and had the gross appearance of a healing granuloma. The microscopic appearance was that of a tuberculous focus with only slight development of fibrous tissue. No cultures of the lesion were made. There was no evidence of tuberculosis elsewhere in the body.

Discussion

These first two cases represented acute situations in which adrenocorticoids were used. In the first patient, the acute adrenal insufficiency responded to steroid therapy; however, there was rapid reactivation of the patient's pulmonary tuberculosis with cavitation. The second patient had tuberculosis in an almost sub-clinical state, when his pneumonia developed, which increased during the time the pneumonia was clearing and he received cortisone acetate. Cortisone was given to the third patient to prevent progression of his arthritis. Since the arthritis was quiescent it is very doubtful that steroid therapy was indicated. In none of these cases can it be proved that the steroid therapy was fully or partially responsible for the reactivation of tuberculosis. However, since considerable stress in the form of surgery and other intercurrent illness usually does not result in flare-ups of tuberculosis, the inference is strong that the cortical steroids played a part in the unfavorable course.

Patients with Addison's disease and active pulmonary tuberculosis can be treated with cortisone or similar substances if antituberculosis therapy is given concurrently.[10] In such situations, the physiologic replacement doses given are much less than the larger, non-physiologic doses given for other conditions. Some workers believe that the spread of pulmonary tuberculosis will not occur on this dosage of cortisone ace-

tate.[10] The part adrenocortical steroids should play in the treatment of tuberculosis is not fully known, and many of the reports concerning their use have been conflicting. In one series reporting the use of cortisone or corticotropin in patients with visible laryngeal lesions, there was improvement in the gross appearance of the lesions.[10] A second group showed no gross change.[12] Biopsies of the laryngeal lesions in the second group actually showed progressive histological changes and increased numbers of tubercle bacilli.

The Laboratory Sub-committee of the Committee of Medical Research of the American Trudeau Society in 1952, prepared a statement about the effects of cortisone or corticotropin on experimental tuberculosis infections in animals.[13] After reviewing approximately 39 experimental studies, it was concluded that in certain animals these agents could convert a chronic tuberculous infection into an acute condition, and their withdrawal could be followed by sudden flare-up of the disease. However, the animal species, conditions of the experiment, and many other factors influence the results. In the same year, the American Trudeau Society Committee on Therapy[12] analyzed 81 known tuberculosis cases treated with cortisone or corticotropin. The following conclusions were reached: (a) The hormone does not always cause an exacerbation of the disease, but it may; (b) There is decreased localization and increased spread of the disease with their use; (c) The development of excavation after hormone therapy is fairly common, and exacerbation of old, apparently inactive lesions may occur. This committee recommended that all patients should be carefully evaluated for tuberculosis activity before starting steroids and there should be liberal use of serial x-ray films and sputum cultures during and after treatment with adrenocorticosteroids.

Summary and Conclusion

Three cases in which the administration of adrenocortical steroids were probably instrumental in the activation of pulmonary tuberculosis are presented. The importance of careful evaluation of patients with known prior tuberculosis infection before starting steroids is emphasized. All patients treated with adrenocorticosteroids should have pretreatment and follow-up x-ray films and sputum examinations if conditions warrant. Careful evaluation of the patient's need for the adrenocortical steroids should be made before they are given.

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Harold G. Muchmore
921 N.E. 13th Street, Oklahoma City, Oklahoma

A Review of the Propagation of

The Nerve Impulse at the Myoneural Junction

and Factors Affecting Transmission

*GEORGE W. INGELS**

Exploration of the basic physiologic mechanisms of nerve-muscle conduction has increased tremendously in recent years and subsequently has led to great advances in the explanation of many clinical signs and syndromes, such as myasternia gravis, which are due to malfunction at the myoneural junction. These findings have been in agreement with the now almost totally accepted basic theory of myoneural transmission, a brief summary of which will be presented followed by many of the more important factors influencing conduction.

In the resting state of the non-myelinated nerve terminals, acetylcholine (ACh) is present at the neuromuscular junction in a protein-bound form.[6] Also concentrated at the junction are quantities of acetylcholine esterase or specific choline esterase, which is the predominant form found in this region.[3, 21] This type has been demonstrated to be distinctly different in many ways from non-specific choline esterase.[3, 34] There is a high affinity to ACh and a high turnover rate, no other ester being hydrolyzed at a greater rate. It splits propionylcholine at the same or at a lower rate, and butyrylcholine and non-choline esters at a low rate or not at all. In contrast, non-specific esterases have a relatively low affinity for choline esters when compared to acetylcholine esterase. They are not inhibited by high concentrations of ACh and display an increasing hydrolysis rate with increasing length of the acyl chain from acetyl to n-butyryl.

Stimulation of the motor nerve causes a cleavage of the ACh from the bound state to a free state in the amount of 10^{-10} μgm per nerve terminal or end-plate per impulse.[1] After a brief latent period, which was determined by Eccles *et al.* to be at least 0.6 microsec. in the cat soleus muscle,[15] the free ACh combines with the protein receptor on the outside surface membrane of the muscle fiber motor end-plate, [9, 29] the end-plate region being much more sensitive to ACh than adjacent areas.

The ACh-receptor complex thus derived implies, according to Nachmansohn,[2, 29] a change in the molecular configuration of the receptor protein which would cause some degree of depolarization of the end-plate surface membrane due to the resultant ionic flow. This change in configuration is explained by assuming that the protein molecule would have to surround the ACh molecule to be in contact with all the methyl radicals of the tetrahedral shaped quaternary group of ACh.

When the depolarization of the end-plate area reaches one half to one third of the normal end-plate potential, the impulse is propagated.[14, 15, 22] Brown found that the amount of injected ACh necessary to produce a contraction or tension equal to the twitch was approximately 2.0 μgm.[6]

Since the ACh-receptor complex is in dynamic equilibrium with the free ester and protein, hydrolysis of the free ester by ACh-esterase to choline and acetate results in a shift of equilibrium toward the recovery of the free protein receptor and subsequent return to the resting state. Phosphate esters such as tetraalkylpyrophosphate, dialkyl-p-nitrophenyl phosphate, and dialkyl fluorophosphate have been found to be very strong irreversible inhibitors of ACh-esterase. These compounds form phosphoryl enzyme complexes rather than the acetyl enzyme. Acetyl enzymes react with water in a few

*University of Oklahoma School of Medicine sophomore medical student and winner of the 1958 Edward C. Mason Award given by the Department of Physiology to a first year student for excellence in scientific writing. This is the prize-winning paper.

microseconds to liberate acetate, whereas the phosphoryl enzyme requires days to react. An extremely active compound, 2-pyridine aldoxime methiodide, has been found to reactivate the inhibited enzyme formed by the two inhibitors, tetraethylpyrophosphate (TEPP) and diisopropyl fluorophosphate (DFP) at near enzyme speeds.[37]

The acetate portion of the hydrolysis combines with the sulfhydryl group of Coenzyme A, a coenzyme isolated by Nachmansohn and Machado,[20] in the presence of adenosinetriphosphate (ATP) to form an acetyl-Coenzyme A complex.[26, 27, 30, 31] The complex is then split through the influence of another enzyme, choline acetylase, and the acetyl group transferred to the other ACh hydrolytic product, choline, to regenerate the protein-bound form of ACh.

The process of ACh formation has been found to be aided by the presence of fluoride. In contrast, copper, iodoacetic acid and iodine have a strong inhibitory effect.[30] Almost anything diminishing the respiratory mechanisms of the neuron, such as narcotics, may decrease the rate of ACh synthesis. Any damage that is brought about in the nerve cell also seems to affect the synthesis of ACh presumably because it interferes with the synthesis of ATP and other factors involved in ACh formation. The lecithinases inhibit the synthesis of ACh probably by breaking down nerve cell mitochondria which are necessary for production of the ATP required for the synthesis.

One of the most investigated inhibitors of neuromuscular transmission is curare. Bovet and Bovet-Nitti recognized that curare resembled two linked molecules of ACh and postulated that curare and closely related compounds blocked neuromuscular transmission by competing with ACh for the receptor protein.[1, 5] One of the related compounds, stilbamidine, a diguanidino derivative, shows similar effects.[4] Kuffler demonstrated that curare and like substances decreased the sensitivity of the end-plate to ACh by as much as one hundred times.[23] Progressive curare block results in a progressive decline in the rate of rise of the total height of the end-plate potential (epp) but with no appreciable effect on its latent period, in a progressive delay in the latent period of the depolarization spike but no change in its height, and finally in a complete block with total disappearance of the spike.[22] Depolarization does not occur due to the effects of the block, but can readily occur on direct electrical stimulation of the muscle, denoting that the electrical excitability of the muscle is not affected by curare.[1, 25] Therefore, any agent is considered to be curare-like if it blocks neuro-muscular transmission without modifying conduction in the nerve or affecting twitch tension in the muscle in response to direct stimulation.[18]

Decamethonium or C 10 is the most active of the polymethylene, bistrimethylammonium iodides causing neuromuscular block in the cat.[32] C 10, like most other quaternary compounds, does not significantly affect ACh-esterase activity but instead, blocks the spike by combining with the receptor proteins and causing depolarization. However, unlike ACh, C 10 is not hyrolyzed at all by ACh-esterase, so that repolarization does not occur. Although d-tubocurare is also a quanternary compound and blocks neuromuscular transmission, the block is curare-like in that there is competition with ACh for the receptor proteins of the junction and depolarization does not result. Jenden found that the action of C 10 on isolated guinea pig diaphragm resulted in two phases of neuromuscular block, the first phase resembling the depolarizing block observed *in vivo* and the second phase resembling the block produced by d-tubocurare.[19] The block by C 10 may arise at a different part of the neuromuscular synapse from that caused by d-tubocurare.[32] C 10 has also been found to resist the anticholinesterases and relieve curare block. Though it is not antagonized by anticholinesterases, pentane and hexane homologues of C 10 cause a decreased action due to competitive inhibition. Previous administration of d-tubocurare also has an inhibitory effect on the action of C 10. The following chart by Paton and Zaimis,[32] summarizes some of the differences between C 10 and d-tubocurarine chloride.

The anti-cholinesterase activity of prostigmine, Nu-1197, Nu-1250, and Nu-1317 which are all prostigmine analogs or quaternary

	C 10	d-tubocurarine Cl
Character of muscle response to tetanic stimulation during block	well-sustained contraction	poorly-sustained contraction
Effect of tetanus on block	none	decurarization
Effect of antiesterases on block	no antagonism	decurarization
Effect on striated muscle	contraction of frog rectus muscle potentiates ACh	no contraction of frog rectus M. Antagonizes ACh
Effect of d-tubocurarine administered previously	antagonized	potentiated (also by C 10 previously)

ammonium compounds; eserine and Nu-2126, which are tertiary amines; and diisopropyl-fluorophosphate (DFP) was found by Eccles and McFarlane to be similar in their actions but varying in their activity, prostigmine being the most effective and DFP usually the least.[14] These compounds depress the enzyme activity to a low level, which subsequently leads to a block of the action potential.[2, 16]

The compounds carbamyl choline and procaine are quaternary compounds and exhibit inhibition at the neuromuscular junction. However, they differ in that carbamyl choline simultaneously blocks and depolarizes while procaine inhibits without depolarizing.[2] The depolarization by carbamylcholine is antagonized by procaine, eserine, d-tubocurare and tertiary prostigmine analogues.

Local application of potassium chloride to the end-plate region results in a rapid tetanus-like contraction even after the end-plate is refractory to the nerve impulse and to ACh. Only when the end-plate does not react to direct electrical stimulation is it insensitive to KC1.[8] However, potassium is not restricted in its effects only to the end-plate region to prevent the depolarization and consequent excitation by potassium.[1]

On initial application of ACh to the end-plate region, the muscle fibers undergo a short, rapid, tetanus-like contraction but are insensitive to further applications and to stimulation of the nerve.[8] Impulses can be initiated at any region on the muscle fiber, provided strong concentrations are applied to the end-plate-free parts of the fibers.[25]

Magnesium blocks transmission similarly to curare but differs from curare in not only blocking ACh but also the effects of potassium.[1] Calcium also has a significant effect on the end-plate region, which has been shown by Kuffler,[24] using frog sartorius M., to be an increased excitability when the calcium ion concentration is reduced to one-third to one-fifth normal.

In denervated muscle, response to the various chemicals is altered. Both electrical activity and contraction of denervated dog gastrocnemious is provoked by d-tubocurare which is opposite to its previous effect.[28] After injection of d-tubocurare, the muscle becomes less or completely unresponsive to previously effective concentrations of ACh. In large concentrations, prolonged muscle concentrations are produced. During these contractions the electrical fibrillation of denervation is greatly diminished and sometimes completely suppressed.[28]

In rat muscle having been denervated from five to twenty-two days, tension developed in response to direct stimulation is not affected by d-tubocurare but C 10 causes weakness of response.[18] This action is suggested by Zaimis to be due to a blocking of the propagated action potential in the area around the end-plate, a region depolarized by C 10.[38]

When the nerve innervating a muscle degenerates, the muscle undergoes disuse atrophy and after about four days the nerve becomes inexcitable; a greater sensitivity to ACh and nicotine develops during the subsequent two weeks until the muscle finally becomes 1,000 to 100,000 times as sensitive.

This sensitivity causes an initial contraction to be followed by a prolonged contraction during which no muscle impulses can be elicited. Normally the region of the motor nerve end-plate is at least ten times more sensitive than other regions but after denervation, although the relationship is still present, the sensitivity of all parts is greatly increased.[7, 12, 23]

The fine fibrillating movements of denervated muscle are due to contractions induced by impulses spontaneously arising in a single muscle fiber at the rate of about ten contractions per second in cat muscle. The focus is often distant to the end-plate region and is not affected by curare and only slightly increased by eserine.[12]

Fatigue of the neuromuscular junction is due to decreasing amounts of ACh liberated by the motor nerve endings until subthreshold levels are reached. The progressive decline is accountable by the fact that the response is due to the sum of the contractions of the individual fibers and if the amounts liberated fall below the threshold of an increasing number of junctions, the contractions of the muscle as a whole will gradually become smaller.[33]

In the preceding paragraphs some of the various and more important means of nerve inhibition at the myo-neural junction have been presented. Examples have been given which illustrate inhibition of the ACh synthesis mechanism, inhibition of the ACh hydrolysis mechanism involving ACh esterase, and inhibition of the receptor mechanism at the motor end-plate region. In addition, the general effects of denervation and cause of fatigue have been noted. Although a more complete list of factors associated with inhibition could be enumerated, the more important examples presented should provide an insight into the theory of nerve impulse propagation at the myo-neural junction and the factors affecting transmission.

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ABSTRACTS

Formation of Scopoletin From Esculin and Esculetin in the Rat

CHAO-HWA YANG,* H. D. BRAYMER,* P. L. PETRAKIS,** M. R. SHETLAR,*** and S. H. WENDER.****

Arch. Biochemistry and Biophysics 75: 583, June, 1958

Following the feeding of esculetin (6,7-dihydroxycoumarin) and esculin (esculetin-6-glucoside) to rats, scopoletin (6 methoxy-7 hydroxycoumarin) and 6-hydroxy-7 methoxycoumarin were found in the urine. When esculin was fed, both esculin and esculetin were identified in the urine; unchanged esculetin was found in the urine after feeding this compound. Paper chromatography indicated the presence of at least four other compounds as yet unidentified.

*Research Assistant, Department of Chemistry, University of Oklahoma, Norman, Oklahoma.

**Research Assistant, Department of Biochemistry, University of Oklahoma School of Medicine.

***Associate Professor of Biochemistry, University of Oklahoma School of Medicine.

****Research Professor of Chemistry, University of Oklahoma, Norman, Oklahoma.

Serum Protein and Glycoprotein Alterations in Swine With Experimental Arthritis

M. R. SHETLAR,* CLARA L. SHETLAR,* R. W. PAYNE,** GEORGE M. NEHER,*** and CHARLES B. SWENSEN.***

Proc. Soc. Exper. Biol. & Med. 98: 254, June, 1958

A serial study was made of protein and glycoprotein changes of swine during arthritis which follows recovery from **Erysipelothrix** infections. As in sera from humans with rheumatoid arthritis, elevated serum glycoprotein, seromucoid and serum globulins and lowered serum albumin concentrations were noted in swine sera during active phases of the disease. No serum 1-globulin was identified in swine sera. During remissions of experimental arthritis, serum glycoprotein levels decreased and the serum albumin increased. Cortisone treatment of animals with active arthritis produced clinical improvement accompanied by striking increases of albumin protein with decreases of seromucoid, serum V-globulin protein and V-globulin bound hexose concentrations.

*Department of Biochemistry, University of Oklahoma School of Medicine.

**Department of Pharmacology, University of Oklahoma School of Medicine.

***Department of Veterinary Science, Purdue University.

Diagnosis of Cerebral Schistosomiasis

JAMES F. HAMMARSTEN*

A.M.A. Arch. Neurol. & Psychiat. 79: 132-135 (Feb.) 1958

Cerebral schistosomiasis may produce a variety of neurological symptoms, such as headache, language dysfunction, paralysis, and Jacksonian or grand mal seizures. Therefore, a patient presenting such symptoms, who has resided in an endemic area even years before, should be studied for possible cerebral schistosomiasis. The search for ova in the feces is a difficult and time-consuming procedure. This report demonstrates the efficiency of biopsy of a rectal specimen in the diagnosis of schistosomiasis. The 12 patients on whom this report is based were hospitalized at two Veterans Administration hospitals. All had schistosomiasis japonica, and all had been in the Philippine Islands. From three to 10 years had elapsed between the time of exposure and the diagnosis. Only two patients had a definite history of acute schistosomiasis while in the endemic area. Four of the 12 patients had seizures, two had focal seizures alone, one had generalized grand mal and focal seizures, and one had psychomotor attacks. In three the diagnosis was first established by a craniotomy. A positive Wasserman reaction in the spinal fluid with a negative Wasserman reaction in the blood was present in two patients. Whereas eosinophilia was present in most of the 12 patients, hepatomegaly, splenomegaly and abnormal results of liver function tests were observed in only a few of them. In this connection the author points out that, whereas hepatic and splenic damages are frequent in long-term residents of endemic areas, this is not the case in short-term residents. Stool examinations were positive in only two of the 12 patients, despite numerous studies. In contrast, the biopsy of a rectal specimen was positive in all but one patient.

*Chief, Medical Service, VA Hospital, and Associate Professor, Department of Medicine, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

Parietal Pleura Needle Biopsy

JACK D. WELSH, M.D.*

Arch. Int. Med., 101: 718, April 1958

Needle biophy of the parietal pleura using a Vim-Silverman needle was performed in 17 patients who had pleural effusions or pulmonary lesions with a high suspicion of neoplasm or tuberculosis. There were 10 specimens which yielded a diagnosis of neoplasm, 2 chronic pleuritis, and 5 were inadequate for examination. The method is considered useful and safe, particularly in patients with pleural effusions. A negative specimen does not rule out tuberculosis or neoplasm. For a description of the technic, the original article should be consulted.

*Resident, Department of Medicine, University of Oklahoma and VA Hospitals.

FACULTY NEWS

ALFONSO PAREDES, M.D.

Alfonso Paredes, M.D., has been appointed Research Associate in Psychiatry, Neurology and Behavioral Sciences. Doctor Paredes received his M.D. degree in 1951 from the University of Mexico. His training in Psychiatry included study at Herrick Memorial Hospital, Berkeley, California, the University of Kansas Medical Center, University of Maryland and the University of Oklahoma Medical Center.

Present research interests lie in the fields of Psychopharmacology, Psychoendocrinology, and Psychopathology of the "brain-damage" patient.

George Rainey Williams, Jr., M.D., has been appointed Assistant Professor of Surgery. He received his M.D. at Northwestern University School of Medicine in 1951 and served his internship at Johns Hopkins Hospital. During his residency in Surgery at Johns Hopkins, he was awarded a William Stewart Halsted Fellowship. Prior to appointment at the University of Oklahoma Medical Center, Doctor Williams held the position of Instructor in Surgery at Johns Hopkins.

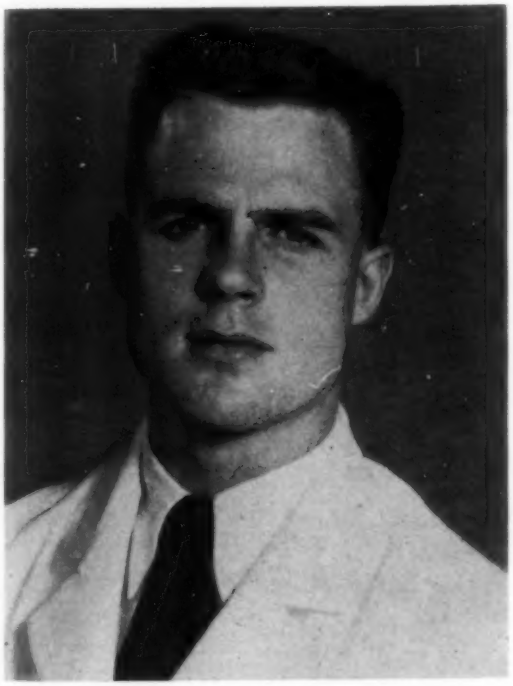
Present research activities are in the field of Cardiovascular surgery.

GEORGE RAINEY WILLIAMS, Jr., M.D.

DeWitt T. Hunter, Jr., M.D., is Associate Professor of Pathology and Director of Clinical Pathology Laboratories at University Hospitals. He graduated from the University of Maryland School of Medicine, Baltimore, in 1952. He was Assistant Resident in Pathology at Johns Hopkins Hospital and further postgraduate training followed at the University of Pennsylvania. At the time of his appointment to the faculty of the Medical Center, Doctor Hunter was associate pathologist at Baylor Hospital in Houston.

Research interests include "in vitro" kidney perfusion studies, cholesterol metabolism and anatomical studies of the prostate gland.

DeWITT T. HUNTER, Jr., M.D.



GLEN G. CAYLER, M.D.

Glen G. Cayler, M.D., has been appointed Assistant Professor of Pediatrics at the School of Medicine. Doctor Cayler received his M.D. degree from the University of California in 1950. Prior to coming to Oklahoma, Doctor Cayler completed a fellowship in pediatric cardiology at Children's Hospital in Boston, Massachusetts. Doctor Cayler is primarily interested in pediatric cardiology.

PRESIDENT'S LETTER

In the year 1880 life expectancy in the United States was 42½ years; in less than eighty years it has risen to 69½ years. Today, of the 180,000,000 people in this country, almost 15,000,000 are over the age of sixty-five, and it is estimated that by 1975 their number will increase to 20,000,000 or more than 10 per cent of the entire population.

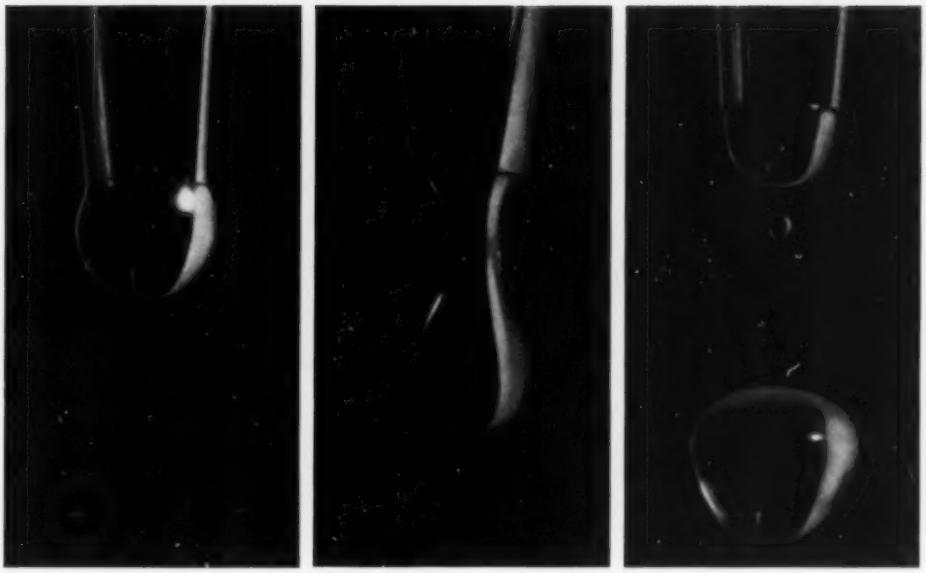
There is little wonder then that the care and welfare of the aged has become one of the major problems facing the American people, particularly the medical profession, since forty percent of all the long-term disabilities are in this group of people who are over the age of sixty-five.

If we are to make a sound approach to this complex problem, we must first understand at least some of the problems of our aged citizens. Mandatory retirement by most industries has produced a very definite psychological imprint on the minds of many of these people who have reached the age of sixty-five. To them they no longer feel that they are productive members of society, but are being turned out to proverbial pasture and left to content themselves with the less important things of life.

Economically, it has been almost impossible under our present tax structure and high cost of living for these people to acquire enough reserve to provide much more than the necessities of life, let alone money enough to meet the costs of long term disability or rehabilitation. It isn't right for them to suffer or die when medical help is available. By some means, financial assistance must be provided, and it is becoming more difficult and in some cases impossible for the families to meet these needs, and by the same token, hospitals, doctors and druggists can no longer absorb this financial burden even though all should help. It then becomes the responsibility of society to bridge the gap, but it is equally as important to preserve the independence and dignity of the individual. How best to attain this goal is still a problem unsolved. I am confident, however, that the medical profession will meet the challenge with unselfish sincerity, dignity and wisdom, and should assume leadership.

E. C. Mohler, M.D.

E. C. MOHLER, M.D.
President



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SEARLE

Medical News

Speakers Listed For Oklahoma Colloquy

Latest findings of investigators in the field of arthritis and related disorders will be reported at the Second Oklahoma Colloquy on Advances in Medicine November 12-15 at the University of Oklahoma School of Medicine.

The list of guest speakers includes such nationally prominent names as Alexander B. Gutman, M.D., Director of Medical Service and of Medical Research at the Mount Sinai Hospital, New York City; John H. Talbott, M.D., head of the Department of Medicine, University of Buffalo School of Medicine, Buffalo, New York; and C. H. Slocumb, M.D., consultant in medicine at the Mayo Clinic's Department of Rheumatic Diseases, Rochester, Minnesota.

Doctor Gutman will speak November 12 on Recent Advances in Purine Metabolism in Relation to Gout and The Concept of Secondary Gout.

His primary interest is the biochemical and metabolic aspects of disease. Doctor Gutman is founder and editor-in-chief of the *American Journal of Medicine* and associate editor of Cecil & Loeb's Textbook of Medicine.

He received his Ph.D. from Cornell University in 1926 and his M.D. from the University of Vienna, Austria, in 1928.

Doctor Talbott, a graduate of Harvard Medical School, has been Professor of Medicine at Buffalo since 1946. He is editor-in-chief of *Medicine* and *Archives of Interamerican Rheumatology.*

He has been a member of a number of expeditions concerned with the effects of high altitude and high temperatures and, in 1951, was director of the U.S. Army Frostbite Commission to Korea.

Therapeutic Aspects of Gout and Selected Aspects of Connective Tissue Disease will be discussed by John H. Talbott, M.D., University of Buffalo School of Medicine, at the Second Oklahoma Colloquy on Advances in Medicine.

Doctor Talbott also will address opening sessions of the conference, speaking on Therapeutic Aspects of Gout and Selected Aspects of Connective Tissue Disease.

Doctor Slocumb will present two papers at the November 14 meeting. They deal with treatment of rheumatoid arthritis and the undesirable reactions observed in the hypercortisone state.

He is past-president of the American Rheumatism Association and a member of the editorial board of its journal, *Arthritis and Rheumatism.* The University of Minnesota Graduate School professor also is on the Medical and Scientific committee of the Arthritis and Rheumatism Foundation.

Doctor Slocumb received his M.D. and M.S.

C. H. Slocumb, M.D., consultant in Medicine for the Department of Rheumatic Diseases, Mayo Clinic, is one of 11 guest speakers who will appear at the Second Oklahoma Colloquy on Advances in Medicine.

from the University of Minnesota Medical School.

Conference sessions November 12-14 will be held in the Medical School auditorium. The final meeting Saturday, November 15, will be a breakfast roundup in Faculty House.

Some 450 persons attended the first Oklahoma Colloquy last year. The second conference, developed by the School of Medicine's Department of Medicine and Division of Postgraduate Education, is sponsored by the Oklahoma Chapter, Arthritis and Rheumatism Foundation and Geigy Pharmaceuticals, Wyeth Laboratories, The Upjohn Company, Pfizer Laboratories, and Schering Corporation.

Invitations have gone to rheumatologists over the nation. Papers to be given by the other eight guest lecturers deal with many aspects of rheumatic fever, rheumatoid disease, lupus erythematosus and other disorders.

The speakers include Morris Ziff, M.D., professor of Internal Medicine, University of Texas, Southwestern Medical School, Dallas; Robert W. Quinn, M.D., head of the Department of Preventive Medicine and Public Health, Vanderbilt University, Nashville, Tenn.; Richard H. Follis, Jr., M.D., chief of the Nutrition and Metabolism section, Armed Forces Institute of Pathology, Washington, D.C.

Ralph Heimer, Ph.D., researcher in rheumatic diseases on the staff of The Hospital for Special Surgery, New York City; Alfred Jay Bollet, M.D., a Markle Scholar and assistant professor of medicine at Wayne State University College of Medicine, Detroit, Mich.; Thomas McP. Brown, M.D., Eugene Meyer, M.D., Professor of Medicine and Chief of Medicine, George Washington University School of Medicine and Hospital, Washington, D.C.

Robert A. Good, M.D., American Legion Memorial Heart Research Professor of Pediatrics, University of Minnesota, Minneapolis; and Vincent C. Kelley, M.D., Ph.D., professor of Pediatrics, University of Washington School of Medicine, Seattle.

Robert W. Quinn, M.D., professor and head of the Department of Preventive Medicine and Public Health at Vanderbilt University, Nashville, Tenn., will present papers at the Oklahoma Colloquy November 12-15 at the University of Oklahoma Medical Center.

International Medical Assembly To Meet in Cleveland

Plans have been completed for the 43rd Annual Scientific Assembly of the Interstate Postgraduate Medical Association to be held in Cleveland, Ohio, November 10-13. Day sessions will be held in the Cleveland Auditorium with the evening sessions convening in the Statler-Hilton Hotel.

The list of guest speakers includes many nationally prominent names. Lecturers for the Monday session which will open at 8:30 a.m. will be: Allan C. Barnes, M.D., Cleveland; Donald W. Mulder, M.D., Rochester, Minnesota; Henry L. Bockus, M.D., Philadelphia; Ormand C. Julian, M.D., Chicago; Arthur C. Kerkhof, M.D., Minneapolis; John A. Gius, M.D., Iowa City, Iowa; William C. Keettel, M.D., Iowa City, Iowa; George Crile, Jr., M.D., Cleveland; Jay Jacoby, M.D., Columbus, Ohio; Willis J. Potts, M.D., Chicago; Jerome W. Conn, M.D., Ann Arbor; Col. John P. Stapp, Dayton, Ohio; and Col. H. H. Ziperman, Ft. Sam Houston.

Participating in the program on Tuesday will be: Louis A. Brunsting, M.D., Rochester, Minnesota; Robert M. Zollinger, M.D., Columbus, Ohio; Edwin H. Ellison, M.D., Milwaukee, Wisconsin; Dan W. Elliott, M.D., Columbus, Ohio; Stanley O. Hoerr, M.D., Cleveland; William D. Holden, M.D., Cleveland; Carroll B. Larson, M.D., Iowa City, Iowa; Charles W. Mayo, M.D., Rochester, Minnesota; William B. Castle, M.D., Boston; Roy G. Holly, M.D., Omaha, Nebraska; William A. Altemeier, M.D., Cincinnati; Richard W. Vilter, M.D., Cincinnati; Richard Patton, M.D., Columbus; Leonard Lovshin, M.D., Cleveland; Waltman Walters, M.D., Rochester, Minnesota; George A. Hallenbeck, M.D., Rochester, Minnesota; and C. Naunton Morgan, F.R.C.S., London, England, who will present the Sullivan Memorial Lecture.

On Wednesday, the ten physicians who will lecture are: Tom D. Spies, M.D., Birmingham; Oliver S. Moore, M.D., New York; John T. Ferguson, M.D., Traverse City, Michigan; Robert W. Wilkins, M.D., Boston; Charles H. Herndon, M.D., Cleveland; Hans Selye, M.D., Montreal, Canada; E. Harry Botterell, M.D., Toronto, Canada; Samuel F. Marshall, M.D., Boston; John G. Young, M.D., Dallas; and Richard Magraw, M.D., Minneapolis.

Nine lecturers who will participate in the Thursday session are: Adolph L. Sahs, M.D., Iowa City, Iowa; John M. Sheldon, M.D., Ann Arbor; Fred H. Allen, Jr., M.D., Boston; Frank W. Newell, M.D., Chicago; Harry Beckman, M.D., Milwaukee, Wisconsin; John H. Laragh, M.D., New York; Harriett P. Dustan, M.D., Cleveland; Erwin Neter, M.D., Buffalo, New York; and Robert F. Schilling, M.D., Madison Wisconsin.

In addition to the lectures, scientific exhibits, teaching demonstrations and medical teaching films will be observed. The program has been approved by the A.A.G.P. providing hour for hour credit in Category 11.

Social activities for the four-day assembly include music and dancing in the ballroom of the Statler-Hilton on Tuesday night. Wednesday night, the annual dinner will honor Charles F. Kettering, noted inventor and scientist. Mr. Kettering will also be the guest speaker and his topic will be "An Inventor Looks at Science and Medicine". Special entertainment for the ladies will include a tea, luncheon, style show and theatre party.

Registration fee for the Assembly will be $10.00 for all physicians except those in the Armed Forces, interning and serving residencies, who will be charged $2.00. Further information and a complete program may be obtained by writing to Erwin R. Schmidt, M.D., Secretary, Interstate Postgraduate Medical Association of North America, Box 1109, Madison 1, Wisconsin.

Registry of Doctors' Nurses Forced to Terminate Activities

The office of O.S.M.A. has been informed by W. Harold Parham, Associate Managing Director of the Florida Medical Association, of a ruling made by the Attorney General of the State of Florida concerning the reputation of the American Registry of Doctors' Nurses, Marianna, Florida, which has circulated promotional material throughout the United States.

The Attorney General, State of Florida, ruled on April 8 that this organization was in violation of the Nursing Practice Act of Florida. The Florida State Board of Nursing later announced that the Registry had temporarily suspended its program in the State of Florida.

Three Bahamas Conferences Listed

Three Bahamas Conferences have been scheduled for this coming winter which will give participants an opportunity to vacation, as well as attend the scheduled meetings. The first of the meetings will be the Sixth Bahamas Medical Conference which will meet from November 28 to December 18. Twenty-eight speakers from different sections of the United States will participate in this conference. Beginning December 29, the First Bahamas Surgical Conference will begin and continue through January 17. Ending the three conferences will be the Serendipity Session which will be held from January 18 through January 31st, 1959.

The British Colonial Hotel, where all sessions will be held, has made it possible for participants and their parties to avail themselves of the facilities of the fully redecorated hotel at the following rates:

From November 28, until December 18, 1958:

$16.00 per person, per day, two in one room, including breakfast, lunch and dinner;

$18.00 per person, per day, one in each room, including breakfast, lunch and dinner;

$8.00 per person, per day, two in one room, European plan;

$10.00 per person, per day, one in one room, European plan.

From December 29, 1958 until January 31, 1959:

$20.00 per person, per day, two in one room, including breakfast, lunch and dinner;

$22.00 per person, per day, one in one room, including breakfast, lunch, and dinner;

$12.00 per person, per day, two in one room, European plan;

$14.00 per person, per day, one in one room, European plan.

When making hotel reservations, a check made out to "Bahamas Conferences" for $75.00 covering the registration fee should be included. It is advisable to make reservations now, as the number of rooms is limited. When reservations are made sufficiently early, any room in the hotel may be booked at the above low rates, on the basis of first come, first served.

An official certificate of attendance will be issued to participants in the conferences. American and Canadian citizens do not require passports. Further information may be obtained by writing to B. L. Frank, M.D., Organizing Physician, 23 East 79th Street, New York 21, New York.

Immunization Booklet Issued

A new edition of the booklet "Immunization for International Travel" was issued recently by the Public Health Service, Department of Health, Education, and Welfare.

The booklet is designed primarily for use of travelers going abroad and for health departments and physicians. It gives current details on immunization requirements for persons entering the United States, including Americans returning from abroad. It also lists requirements and recommendations for immunization in 200 other countries, and in some cases, additional recommendations of the Public Health Service for American travelers.

Prepared by the Division of Foreign Quarantine of the Public Health Service, the booklet is for sale by the Superintendent of Documents, Government Printing Office, Washington 25, D.C. for 30 cents.

Bell System to Telecast Science Show

The Bell System Science Series will present its second television program devoted to the working of part of the human body in "Gateways to the Mind," the story of the human senses, which will be seen over the NBC network on Thursday evening, October 23, at 8 p.m., EDT. "Hemo the Magnificent," an earlier program in the same series, was devoted to the story of blood and the circulatory system.

Some fourteen different senses are discussed in "Gateways to the Mind" in explaining how the senses function as the channels through which all knowledge of the external world is passed to the brain. Both scientific documentary film and animation are used in the program. Much of this material will be new to the general public.

After its telecast on October 23, "Gateways to the Mind" will be made available on 16 mm. color film by Bell Telephone companies for group showings to interested organizations.

Quarterly Legislative Review

A special report prepared by the AMA Washington Office

The second session of the 85th Congress, beset with space age and other problems and operating in the charged atmosphere of an election year, found time to take up an unusual number of bills of interest to medicine. It passed more than a dozen. Just as notable were two bills that did not pass. While the Forand bill for a hospitalization program under social security failed to clear the House Ways and Means Committee, the committee did order the Department of Health, Education, and Welfare to make a thorough study of the problem of financing medical care of the aged, with emphasis on use of social security. Because the report is due by next February 1, the basic issue is almost certain to come to the front again early in the new Congress. Another major issue left hanging was that of tax-deferment on annuities for the self-employed—the Keogh bill. It went through the House by an overwhelming vote and won the suport of 32 Senators, two factors that suggest it may be enacted next year.

Following, we review briefly the provisions of all major health bills enacted in both sessions of the 85th Congress, and outline the prospects for the more important measures that were left by the wayside.

Medicare Appropriations (Public Law 85-724, Aug. 22)

Congress took a long look at the medicare program, now nearing its second anniversary, and decided that the civilian phase of the program had to be curtailed in favor of greater use of military facilities. The House first trimmed $10.2 million from an admittedly slim budget of $70.2 million, and then wrote into the Defense Department appropriation a section that would have prevented the services from asking for any supplemental appropriation for the entire fiscal year or using other funds. When it reached the Senate, Medicare and Defense officials joined with the American Medical Associaton and others in a plea for restoration of funds and elimination of the destructive section. This was accomplished through an amendment sponsored by Senator Knowland (R., Calif.). In the ensuing conference, language was written in a report which, while not having the full force of law, nonetheless directed the military to start cutting back on some aspects of civilian medicare. To this end, the Office for Dependents Medical Care announced new restrictions effective this fall. They are aimed at higher military facilities utilization, such as requiring dependents living with sponsors to use military resources unless they are not available.

Social Security Amendments (Public Law 85-840, Aug. 28)

As it has done every election year since 1950, Congress again amended the Social Security Act. It increased Old Age, Survivors and Disability Insurance benefits by 7%, in response to demands that benefits keep pace with the cost of living. It provided an additional $197 million for public assistance recipients, and gave states greater flexibility in use of federal funds for financing the medical care of the aged, blind, the disabled and dependent children. To finance the liberalizations, the law increases the taxable base from $4200 to $4800 of gross employment earnings and raises the tax in 1959 from 2¼% to 2½% for the employer and employee, and from 3 3/8% to 3¾% for the self-employed. Additional increases are scheduled for 1960, 1963, 1966 and 1969. By 1969, the self-employed will be paying 6¾% of earnings.

Congress left the door ajar for consideration by the next Congress of bills using the social security system to provide hospital and medical care for OASDI beneficiaries. An articulate minority wanted this enacted this year via the proposal of Rep. Aime Forand However, the House Ways and Means Committee directed the administration to make a study and report by next February on the various possibilities for financing medical care for the aged, with particular emphasis on the possible practicability of increasing OASDI taxes and using the money to purchase health insurance on retirement. The AMA took a strong stand against using the social security system to provide such care, viewing it as a beginning of national compulsory health insurance.

White House Conference on Aging (Signed Sept. 2, Awaiting P.L. No.)

The President is instructed to call a White

House Conference on Aging in January, 1961, by a measure passed late in the session. This national meeting will bring together federal, state and local leaders working in the field of aging. Their objective: to arrive at facts and recommendations on the utilization of skills, experiences and energies, and the improvement of the conditions of older people. A final report would be submitted to the President within 90 days after the conference. A series of state-organized meetings would precede the 1961 conference. To help the states finance these meetings, the law provides up to $15,000 a state with a minimum of $5,000. These figures, reduced from the original $50,000 per state, were used with the anticipation that states would also participate substantially in the financing. The AMA gave this legislation its full support; author of the bill was Rep. John Fogarty (D., R.I.).

Chemical Addities in Food (Awaiting President's Signature)

In an 11th hour action, the Senate passed a House-approved bill on the last day of the session which prohibits use of chemical additives in foods until their pre-testing has been approved by the Food and Drug Administration. Elaborate provisions are made for appeals to federal decisions.

Health Appropriations (Public Law 85-580, Aug. 1)

In response to appeals from a number of sources, the 85th Congress set a new high in money voted for the Department of Health, Education, and Welfare, particularly for the U.S. Public Health Service. The latter now is spending at the rate of close to three quarters of a billion dollars a year. Last year PHS received from Congress approximately $562 million; this year's total is $745,747,000. Members of Congress find it difficult to vote against more funds for medical research and a myriad of other health programs, once health-oriented House and Senate committees have agreed on certain figures for the ensuing year. Research money for the seven institutes was increased nearly 40% over last year, while the Hill-Burton hospital construction program received a boost of close to 55 %. If one is to judge from a recent study group of HEW, the peak of spending in the health field hasn't yet been reached. Congress also voted $6.9 million for the long-sought new quarters for the National Library of Medicine.

Hill-Burton Amendments (Public Law 85-589, Aug. 1 and Public Law 85-664, Aug. 14)

Because a full year's notice is deemed necessary in future planning, Congress voted a 5-year extension of the Hill-Burton hospital construction program. The act otherwise would expire next June. In a separate action, Congress amended the act to permit for the first time Hill-Burton loans at the same rate of interest the government pays for its own borrowing. Under the loan act, an applicant would have to comply with all H-B regulations, the same as regular H-B applicants. The extension bill is Public Law 85-664, and the loan act, Public Law 85-589. The AMA testified in support of the Hill-Burton extension.

Defense Reorganization (Public Law 85-599, Aug. 6)

At the prodding of the House Armed Services Committee, the Defense Department is finally reorganizing. The number of Assistant Secretaries of Defense, which Congress felt had grown too large, was trimmed back by one. The affected post in all likelihood will be that of Assistant Secretary for Health and Medical Affairs, which would be downgraded to that of special assistant. The AMA fought hard to have the act make clear that this post would be saved, and it continues hopeful that something can be worked out before the act goes into effect in January.

Public Health School Grants (Public Law 85-544, July 22)

Eleven schools of public health were promised a total of $1 million annually in federal grants to assist them in professional training, specialized consultative services and technical assistance with the states. The final act was simply an authorization. Efforts were made late in the session by the Senate to add $1 million to a supplemental appropriation for a number of agencies. This item was knocked out in conference, which means that funds will not be available until the next Congress acts.

Civil Defense Grants (Public Law 85-606, Aug. 8)

To bolster sagging state civil defense programs, Congress voted grants to the states for purchase of radiological instruments, personal equipment for state and local civil de-

fense workers and for administrative and personal expenses. Amounts for the first category would not exceed $35 million; for the second category, not more than $2 million, and for the third, not over $25 million.

Military and VA Pay Schedules (Public Law 85-422, May 20, and Public Law 85-462, June 20)

General pay raises for the military (P. L. 85-422) included the same increases for physcians in the services. The law also retained the incentive pay schedule for doctors in uniform which has been in effect since 1947. Congress, in a separate act (P.L. 85-462), also approved salary increases for physicians in the Veterans Administration. It voted down a provision that would have given VA optometrists the same professional status as physicians and dentists.

Union Management Health and Welfare Plans (Public Law 85-836, Aug. 28)

To correct abuses in health and welfare plans, Congress after considerable debate voted a measure requiring both labor and management health and welfare plans to make annual financial reports to the Secretary of Labor. It exempts plans with fewer than 25 members. Fines as high as $10,000 or five years imprisonment are provided for falsification of reports.

Research Facilities Extension (Public Law 85-777, Aug. 27)

Two years ago Congress voted a new program of grants to help medical schools and similar facilities doing research in various crippling and killing diseases to construct laboratories and similar buildings or to remodel existing structures. The program was to run for three years, with an annual appropriation of $30 million. With a backlog of applications, the administration sought an extension for another three years. It also asked for a clarification of "multi-purpose" facilities. In the process, the bill was amended in committee so that money available would have been available for both research and teaching facilities. This back-door approach to medical school aid later was dropped by the committee, because it was felt that it would jeopardize passage of the simple extension.

Doctor Draft Extension (Public Law 85-62, June 27, 1957)

Under this act passed in the first session, selective service has authority until July 1, 1959 to call certain physicians up to age 35 for military service. Only those doctors with obligations under the regular draft and who have been deferred for any reason may be called. Although the military has been getting enough doctors through new graduates and volunteers, it expects to ask for another extension next year.

Jenkins Keogh Tax Deferral (Died in Senate Finance Committee)

The drive to give the self-employed equal treatment with the employed in setting aside tax-deferred sums for retirement plans moved closer than ever to enactment. A bill passed the House late in July with only a smattering of opposition. But it died in the Senate Finance Committee; a major factor was Treasury Department insistence it would result in a large tax revenue loss. AMA, in concert with the American Thrift Assembly, pressed hard for enactment. New efforts to get the measure passed in the 86th Congress are being planned.

Community Facilities Loans (Killed in House)

A bill that started out as an anti-recession measure lost steam as it progressed in Congress. It provided for low-interest loans to states and communities for a wide range of public works, including construction of community hospitals. The measure was voted down in the House after it had passed the Senate.

Medical School Construction Aid (Died in Congress)

Bills to authorize one-time grants for new and existing medical schools to build classrooms were pending in both House and Senate at adjournment. Extensive hearings were held by the House Interstate health subcommittee. No bill was reported to the floor because of (1) concern over the segregation issue, (2) a question of whether the states have exhausted all resources, and (3) a reluctance of some committee members to spend the money now. The AMA supported one-time grants in its testimony.

Civil Aviation Medicine (Died with the Congress)

Efforts to establish a Civil Air Surgeon with broad authority in civilian air safety failed to pass. But with creation of the Federal Aviation Agency, administration assurances have been given that the needs of aviation medicine will be considered in setting up the new agency. The AMA was a

strong supporter of the idea of a Civil Air Surgeon.

Veterans Hospitalization (Died with the Congress)

Late in the session as a windup to lengthy hearings on veterans entitlement to VA hospitalization, the House Veterans Affairs Committee reported out an omnibus hospitalization bill. The measure had as its major objective the opening of some 5,000 additional beds which the committee maintains the Budget Bureau is holding back on. It was reported too late for final action. The AMA testified in favor of a clear spelling out by Congress of veterans entitlement to federal care.

Nursing Home Mortgage Guarantees (Died in House)

Efforts to provide new capital for proprietary and non-proprietary nursing homes through FHA-type mortgage loan guarantees failed of passage. The provision, strongly endorsed by the A.M.A., was part of an omnibus housing bill that failed to pass the House under suspension of rules after Senate approval. Last-minute efforts to separate the nursing home portion from the bill and have it enacted also failed.

Southern Medical Association Dedicates New Building

Formal opening of the $250,000 home of Southern Medical Association was held in Birmingham, Alabama, Sunday, September 7. The new headquarters office building represents several years of planning and more than one year of construction and in the words of Association president W. Kelly West, M.D., Oklahoma City, is "a magnificent monument to Southern medicine." More than 1,000 distinguished guests representing the medical profession, local and state officials, lay and Auxiliary leaders were among those present.

The new home office building is a split-level structure fronting on Highland Avenue at 26th Street South. In addition to providing a meeting place and business center, a library-conference room, Woman's Auxiliary headquarters and other work areas, it contains space for the monthly *Southern Medical Journal.*

SMA, which now has 13,000 members, has maintained headquarters in Birmingham for 43 of its 52 years. It was founded in Chattanooga in 1906 and offices were in Mobile before being moved in 1913.

Fifty Attend Red River Valley GP Meeting

Fifty physicians, including ten from Texas, registered at the Fifth Annual Meeting of the Red River Valley Section of the Oklahoma Chapter of the American Academy of General Practice. Held at Lake Murray Lodge on September 7, the meeting was the most successful to date.

Most of the physicians, who came from all areas of the state, were accompanied by their families and all took advantage of the excellent recreational facilities which were available. The popularity of the meeting site prompted many to suggest that future meetings be made two day affairs, with lectures in the mornings and afternoons left free for fishing, boating and swimming.

Charles E. Wilbanks, M.D., Tulsa, presided over the morning session which began with an audiovisual presentation on "Disorders of the Heart Beat," a film sponsored by the American Heart Association. Following the film, Rex Kenyon, M.D., Oklahoma City Pathologist, discussed the subject, "How to Get the Most for Your Laboratory Dollar." The morning session concluded with a paper by Kemp Clark, M.D., entitled, "Essentials of a Good Neurological Examination." Doctor Clark is Chairman of the Division of Neurosurgery, Southwestern Medical School, Dallas.

Robert Sturm, M.D., Oklahoma City, served as presiding officer of the afternoon session which began with a presentation by Doctor Kenyon on "Further Considerations of Laboratory Procedures." Finally, a paper by Doctor Clark, "Management of Cerebral Trauma", concluded the scientific portion of the meeting.

Financial support for the meeting was provided by Wyeth Laboratories. District Manager Howard A. Dicken and his associates, Gordon Gunn and R. W. Parr assisted Roger Reid, M.D., Ardmore, in handling local arrangements. Doctor Reid coordinated all activities for the meeting.

THE CITATION

MEDICO-LEGAL BRIEFS

Prepared by the Law Department of the American Medical Association

OSTEOPATHY—Prior to July, 1958 Article II of the Constitution of the American Osteopathic Association read as follows:

"The objects of this Association shall be to promote the public health and the art and science of the osteopathic school of practice of the healing art;

"By maintaining high standards of osteopathic education and by advancing the profession's knowledge of surgery, obstetrics, and the prevention, diagnosis and treatment of disease in general;

"By stimulating original research and investigation; and by collecting and disseminating the results of such work for the education and improvement of the profession and the ultimate benefit of humanity;

"That the evolution of the osteopathic principles shall be an ever-growing tribute to Andrew Taylor Still, whose original researches made possible osteopathy as a science."

At the meeting of its House of Delegates, in Washington in July, 1958, Article II of the A.O.A. Constitution was amended so that it now reads as follows:

"The objects of this Association shall be to promote the public health, to encourage scientific research, and to maintain and improve high standards of medical education in osteopathic colleges."

CHEMICAL TESTS FOR INTOXICATION —IMPLIED CONSENT LAW—The State of New York amended its implied consent law on February 19, 1958 to be effective on July 11, 1958. Specifically, Section 71A of the Vehicle and Traffic Law was amended by Chapter 666 of the laws of 1958 to provide that a physician shall not be sued for drawing blood for chemical tests when done at the request of a police officer. Under the new law a suit may be maintained against the state or its subdivisions depending on what police department is involved. The state or subdivision may in turn sue the physician for the amounts recovered by reason of gross negligence or bad faith on the part of said physician.

PHYSICIAN DISPENSING DRUGS WITHOUT PRESCRIPTION—A practicing physician sold three separate lots of dextroamphetime hydrochlorine tablets to two Federal agents whom he supposed to be truck drivers. Prior to dispensing them the physician had not prepared or given the agents any prescription, had not physically examined either of them and had not questioned them or "prescribed" a dosage or otherwise attempted to acquaint himself with either the physical condition or needs of either man. The jury of the U. S. District Court convicted the physician for violation of the provision of the Food, Drug and Cosmetic Act that prohibits the dispensing of harmful drugs transported in interstate commerce without a prescription. The U. S. Court of Appeals in affirming this judgment held that the Act applied to physicians.

Brown v. *U. S.*, Court of Appeals for the 5th Circuit; No. 16536; January 3, 1958

ABORTION—The Supreme Court of Washington upheld the conviction of a physician on two counts of aiding and abetting the commission of the crime of abortion. The physician was sentenced to five years in the State penitentiary on each count, the sentences to run concurrently.

State v. Bates, 324 P. 2d 810 (Wash., April 24, 1958)

HOSPITAL STAFF MEMBERSHIP — A Fresno, California physician, specializing in neurosurgery, has brought a suit seeking $500,000 damages from various physicians, members of staff committees of the Fresno Community Hospital, because of statements they made concerning his ability which resulted in his being dropped from the Fresno Community Hospital staff.

Bailey v. Tuschka et al., in the Superior Court of the State of California In and For the County of Fresno, No. 101580, (1958).

Coming Meetings

UNIVERSITY OF OKLAHOMA MEDICAL CENTER

POSTGRADUATE PROGRAM*

Oklahoma City, Oklahoma

Individual Postgraduate Courses

ARTHRITIS AND RELATED DISORDERS—Nov. 12, 13, 14, and 15

Second Oklahoma Colloquy on Advances in Medicine. The program will be devoted to Arthritis and related disorders. Twelve nationally prominent investigators in their field will participate and present the results of original work from their laboratories.

ADVANCE ELECTROCARDIOGRAPHY — March 2 through 6

(Prerequisite, Dr. Bayley's Basic Electrocardiography course.)

OBSTETRICAL-GYNECOLOGICAL SYMPOSIUM—March 7

Sponsored by the Oklahoma City Obstetrical and Gynecological Society. There will be two prominent guest lecturers.

OPHTHALMOLOGY-OTOLARYNGOLOGY SYMPOSIUM—March 12 and 13

Sponsored by Oklahoma City Society of Ophthalmology and Otolaryngology.
Guest Lecturers:
Michael J. Hogan, M.D., Ophthalmologist, San Francisco.
Prominent Otolaryngologist to be announced.

ORTHOPEDIC SYMPOSIUM—April 10 and 11

Treatment of Athletic Injuries.
Sponsored by the Regional Committee on Trauma of the American College of Surgeons.

FIFTH ANNUAL COMBINED SURGERY, RADIOLOGY, PATHOLOGY SYMPOSIUM—May 14 and 15

Diagnosis and Treatment of Thyroid Diseases.
Sponsored by the Oklahoma Association of Pathologists, Oklahoma Association of Radiologists and Oklahoma Chapter of American College of Surgeons. Guest participants of national reputation in surgery, radiology and pathology will participate.

OKLAHOMA ASSOCIATION OF HOUSE STAFF PHYSICIANS—May 22

Two guest lecturers and presentation of original papers by members of the various house staffs will highlight this program. Participating hospitals are: Hillcrest Medical Center, Tulsa, St. John's, Tulsa; McBride, Mercy, St. Anthony, University, Veterans Administration, Wesley, Oklahoma City; Central State Hospital, Norman.

SERIAL POSTGRADUATE COURSE

Postgraduate Division

UNIVERSITY OF OKLAHOMA MEDICAL CENTER

Oklahoma City, Oklahoma

1958-1959

Nov. 19—Surgery—Ano-Rectal Lesions and Their Management.

Dec. 10—Medicine—The Selection of Patients for Cardiovascular Surgery.

Jan. 14—Pediatrics—Diagnosis and Management of Heart Disease in Infancy and Childhood.

Feb. 11—Urology Symposium and C. B. Taylor Lectureship. (Guest Lecturer to be Announced.)

Mar. 11—Medicine—Advances in the Diagnosis and Management of Common Allergic Disorders.

April 8—Anesthesiology—Anesthesia for the Part-Time Anesthetist.

May 13 — Pediatrics — Antimicrobial Therapy and Treatment of Infectious Disease in Childhood.

June 10—Surgery—Herniae.

Designed so physicians may attend four hours of formal instruction in the above fields while spending only one-half day from their office, this series is approved for credit by the Oklahoma Academy of General Practice. Time will be 3:30 to 8:30 p.m. on the Second Wednesday of each month, September through June. Registration is $3.00 per session or $25.00 for the entire series.

*Further information may be obtained from the Office of Postgraduate Education, University of Oklahoma School of Medicine, 801 N.E. 13th Street, Oklahoma City, Oklahoma.

OKLAHOMA CITY CLINICAL SOCIETY

October 27, 28, 29, 1958

Biltmore Hotel Oklahoma City

The Twenty-Eighth Annual Conference of the Oklahoma City Clinical Society will be held October 27, 28 and 29 in the Biltmore Hotel, Oklahoma City. Registration fee of $20.00 will include all features. Further information may be obtained by writing to: Executive Secretary, 503 Medical Arts Building, Oklahoma City, Oklahoma.

SECOND OKLAHOMA COLLOQUY
ON ADVANCES IN MEDICINE

November 12, 13, 14 and 15, 1958

The Second Oklahoma Colloquy on Advances in Medicine will be held on November 12, 13, 14 and 15. Eleven nationally prominent investigators in their field will participate and present the results of original work from their laboratories.

Registration will be open to all physicians. Further information may be obtained by writing to the Division of Postgraduate Education, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

THE UNIVERSITY OF TEXAS
CLINICAL CONFERENCE ON CANCER CHEMOTHERAPY

November 14-15, 1958 **Houston, Texas**

The University of Texas M.D. Anderson Hospital and Tumor Institute and The University of Texas Postgraduate School of Medicine will present the third annual clinical conference on November 14 and 15, 1958 at the Texas Medical Center in Houston.

Eight hours credit will be certified by the American Academy of General Practice for attendance at this conference. An advance $5.00 registrar's fee must accompany the registration for the Academy. Further information and a detailed program may be obtained from the University of Texas Postgraduate School of Medcine, Jesse Jones Library Building, Houston, Texas.

THE UNIVERSITY OF TEXAS
POSTGRADUATE SCHOOL OF MEDICINE

Practical Electrocardiography*
December 15-19, 1958 **Houston, Texas**

The University of Texas, Postgraduate School of Medicine announces a course in Practical Electrocardiography to be held in Houston, December 15-19, 1958. The course will emphasize Spacial Vector-Electrocardiography. The J.J. and Una Truitt Lecturer for this course will be Robert F. Grant, M.D., of the National Heart Institute.

ANESTHESIOLOGY*
February 18, 19, 20, 1959 **Houston, Texas**

The Fourth Annual Course in Anesthesiology to be offered by the University of Texas Postgraduate School of Medicine will be held February 18, 19, 20, 1959 in Houston. The course is designed to review theory and practice of commonly used anesthetic techniques and will include discussions of some of the newer drugs.

*Address all inquiries to: The University of Texas Postgraduate School of Medicine, 410 Jesse Jones Library Building, Houston 25, Texas.

AMERICAN CANCER SOCIETY
ANNUAL SCIENTIFIC SESSION

SYMPOSIUM ON CANCER OF THE COLON AND RECTUM

October 20-21, 1958 **Biltmore Hotel**
New York City

A complete program of the Symposium on Cancer of the Colon and Rectum to be presented at the Annual Scientific Session of the American Cancer Society may be obtained by writing to Director, Professional Education, American Cancer Society, Inc., 521 West 57th Street, New York 19, New York.

INTERNATIONAL MEDICAL ASSEMBLY
of
SOUTHWEST TEXAS

January 26, 27, 28, 1959
Gunter Hotel **San Antonio, Texas**

The International Medical Assembly of Southwest Texas will hold its annual meeting January 26, 27, 28, 1959 in San Antonio, Texas at the Gunter Hotel. Further information may be obtained by writing to Mr. S. E. Cockrell, Jr., Executive Secretary, 202 West French Place, San Antonio, Texas.

INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION

November 10-13, 1958 **Cleveland, Ohio**
Statler-Hilton Hotel

The 43rd Annual Scientific Assembly of the Interstate Postgraduate Medical Association will be held in Cleveland, Ohio, November 10-13. Write to Erwin R. Schmidt, M.D., Secretary, Interstate Postgraduate Medical Association of North America, Box 1109, Madison 1, Wisconsin for complete details.

SOCIETY FOR CLINICAL AND EXPERIMENTAL HYPNOSIS

October 29-30, 1958 **Chicago, Illinois**

The Society for Clinical and Experimental Hypnosis, an International Scientific Society, comprised of physicians, dentists and psychologists engaged in the clinical use of hypnosis, will present a scientific program in Chicago at the Morrison Hotel, October 29-31, 1958.

The program will include Breakfast Seminars, Round-table Luncheons, Panel Discussions and Formal Presentations. The Medical Program will include such topics as: Hypnotherapeutic Control of Habit Patterns: During Addiction, Smoking, Overweight; Hypnosis in Physical Therapy and Rehabilitation; Hypnosis in Asthma and Allergic Manifestations; Use and Abuse of Hypnosis in General Practice; Hypnosis in Pediatrics and Geriatrics; Hypnosis in Minor and Major Surgery; Hypnosis in Internal Medicine; Hypnoanesthesia in Obstetrics; Physiology of Hypnosis; and Hypnosis in Psychiatry.

Immediately preceding the Annual Meeting of the Society for Clinical and Experimental Hypnosis, the Institute for Research in Hypnosis of the Long Island University Postgraduate School will present its Annual Workshop in Clinical Hypnosis, October 27-29, at the Morrison Hotel.

Registration for Breakfast Seminars, Round-table Luncheons and General Sessions will be limited. For a copy of the program and more detailed information, write to the Administrative Secretary, Society for Clinical and Experimental Hypnosis, 750 North Michigan Avenue, Chicago 11, Illinois.

ACADEMY OF PSYCHOSOMATIC MEDICINE

October 9-11 **New York, New York**

The fifth annual meeting of the Academy of Psychosomatic Medicine will be held October 9-11, 1958, at the Park Sheraton Hotel in New York City. The program will be devoted to the Psychosomatic Aspects of Internal Medicine and will include formal papers, panel discussions and luncheon conferences.

Information may be obtained from Bertram B. Moss, M.D., Suite 1035, 55 East Washington Street, Chicago 2, Illinois.

SYMPOSIUM on the TREATMENT OF LYMPHOMAS and LEUKEMIAS

sponsored by

American Cancer Society, Oklahoma Division

Venetian Room, Skirvin Hotel — **9:00 a.m. — 5:00 p.m., DECEMBER 6, 1958** — **Oklahoma City, Oklahoma**

PANELISTS

William Dameshek, M.D.
New England Center Hospital
Boston, Massachusetts

Leon Dmochowski, M.D.
Chief, Virology & Electron Microscopy Section
M.D., Anderson Hospital & Tumor Institute, Houston, Texas

Leon O. Jacobson, M.D.
Argonne Cancer Research Hospital
The University of Chicago
Chicago, Illinois

Wayne Rundles, M.D.
Duke University
School of Medicine
Durham, South Carolina

Organization News

Council, Delegates Meet; Medicare Contract Terminated

Highlighting a weekend of meetings which were held at the Executive Office, was the unanimous vote of the Delegates on September 21, to withdraw the O.S.M.A. from the administrative and operative phase of the Dependents' Medical Care Program. The action taken by the delegates followed the recommendations of the Association's Medicare Committee which were endorsed by the Council on the preceding day.

Background

Budgetary economies imposed by the 85th Congress precipitated the withdrawal of the Association from any official responsibility toward the operation of the drastically curtailed Medicare Program. After Congress made a severe cut in monies to be allocated for this purpose, the Department of Defense called representatives of state medical societies into Washington and announced details of a restricted health program which were to become effective on October 1. In addition to requiring dependents who reside with their sponsors to obtain certification from their commanding officer prior to receiving care from civilian sources, other restrictions were made in benefits, principally in regard to maternity care, injuries, termination visits, pre and post surgical tests, neo-natal visits, nervous and mental diseases, acute emotional disorders and elective surgery.

The Medicare Committee's recommendation for the Association to withdraw as contracting agent for the Oklahoma phase of the program was presented to the Council on Saturday afternoon, approved and relayed on the following day to the Delegates who were called in by President E. C. Mohler, M.D., for the Medicare Problem only. Accompanied by two committee members, Doctors Tom Points and William Renfrow, Doctor Brown outlined the committee's reasons for recommending the termination of the contract as follows:

1. The principles of Free Choice of Physician has been abruptly terminated by restriction of all dependents living with sponsors to care in military installations.

Marshall O. Hart, M.D., reports to the Council.

2. The decision as to type of medical care to be rendered has been placed largely in non-medical hands.

3. Untenable restrictions have been placed on the private physician who elects to care for these dependents.

4. Unnecessary hospitalization is once again being given impetus by the exclusion of benefits for office treatment of bodily injuries.

5. Administration of the program has become logistically impractical for the Oklahoma State Medical Association.

Resolutions Passed

After hearing Doctor Brown's report and the Council's recommendation for approval, the House of Delegates took unanimous affirmative action on the following resolution:

"Resolved, by the House of Delegates of Oklahoma State Medical Association, in special meeting assembled September 21, 1958, that said Association immediately terminate its participation in the Medicare Program.

Be it Further Resolved, that the individual members of the Association are not hereby prevented from rendering care to patients entitled to the benefits of said program, but members will hereafter deal directly with such agent as

may be appointed to administer the program."

During discussion, it was pointed out that the Medicare Committee will terminate its activities on October 1, but that physicians should continue to process claims with Blue Shield until further notice. Details regarding the termination of contractural obligations are yet to be worked out.

Other Council Actions

Medicare was only one of many subjects covered by the Council. During the six hour session, the group:

1. Approved the appointment of D. W. Branham, M.D., Oklahoma City, to the *Journal* Editorial Board, replacing Eugene Rice, M.D., Shawnee, deceased.

2. Concurred in the names proposed to serve on the new Blue Shield Liaison Committee.

3. Referred a request by an O.U. graduate student to publish historical medical records and transcribed interviews to the Editorial Board for further recommendation.

4. Appropriated $250.00 in prize money for the Oklahoma phase of the forthcoming American Association of Physicians and Surgeons' Essay Contest.

5. Heard a report by Councilor Duer concerning the activities of the Oklahoma Osteopathic Association which has, among other things, promoted a hospital bond issue in his district containing a dual staff provision and referred this and other osteopathic matters to the Public Policy Committee.

6. Received a report on the Garfield County service-type Blue Shield Plan from Henry T. Russell, M.D., Enid, and referred the question of the propriety of such a program to the Blue Shield Liaison Committee.

7. Adopted an interprofessional code, prepared by the Association's Committee on Medico-Legal Relations, for subsequent negotiation with the Oklahoma Bar Association and final approval by the House of Delegates.

8. Became familiar with the AMA Health Program for Older Citizens, as presented by Hayden H. Donahue, M.D., Chairman of the Association's Committee on the same subject, and concurred in his desire to take immediate steps toward implementing the program within the state.

9. Heard reports from Mark R. Johnson, M.D., Chairman of the Committee on Medical Care for Public Assistance Recipients, and Ben H. Nicholson, M.D., Editor of the *Journal*, concerning the advisability of encouraging the Department of Public Welfare to contract with Blue Shield for the medical care of such recipients. After much debate, it was moved and passed that the Committee should make further study, but be instructed that a service type program would be unfavorable.

10. Agreed to provide assistance toward any catastrophic situation which may occur during the 1960 National Boy Scout Jamboree, providing the tentative selection of McAlester as the site is confirmed.

Branham Joins Editorial Board

A recent addition to the editorial staff is Donald W. Branham, M.D., of Oklahoma City. Doctor Branham is a urologist and a graduate of the Oklahoma School of Medicine where he is the chairman of the Department of Urology. He also holds a fellowship in the American Medical Writers Association.

Program Completed For Oklahoma City Clinical Society

Fifteen prominent guest lecturers will highlight the Twenty-Eighth Annual Conference of the Oklahoma City Clinical Society which will be held in the Biltmore Hotel, October 27, 28 and 29. Features of the meeting will include: general assemblies, clinical pathologic conference, round-table luncheons, specialty lectures, dinner meetings and commercial exhibits. The completed program follows:

Monday, October 27, 1957

GENERAL ASSEMBLY LECTURES:

9:00 a.m.—NATURAL CHILDBIRTH
EDWIN J. DeCOSTA, M.D., (Obstetrics) Associate Professor of Obstetrics and Gynecology, Northwestern University Medical School, Chicago, Illinois.

9:30 a.m.—CURRENT THOUGHTS ON HYSTERECTOMY
JOHN ALEXANDER WALL, M.D., (Gynecology) Clinical Associate Professor of Gynecology, Baylor University College of Medicine, Houston, Tex.

10:00 a.m.—VISIT THE EXHIBITS

10:30 a.m.—PRECANCEROUS DERMATOSES
LOUIS A. BRUNSTING, SR., M.D., (Dermatology) Professor of Dermatology, Mayo Foundation, University of Minnesota Graduate School, Rochester, Minnesota.

11:00 a.m.—PRESENT STATUS OF THE USE OF CORTICOTROPIN AND CORTICOSTEROIDS IN ALLERGIC STATES
JOHN M. SHELDON, M.D., (Allergy) Professor and Director, Department of Postgraduate Medicine, Head of Allergy Clinics, University of Michigan Medical School, Ann Arbor, Mich.

11:30 a.m.—THE DIAGNOSIS OF PSYCHONEUROTIC REACTIONS
C. KNIGHT ALDRICH, M.D., (Psychiatry) professor and Head Department of Psychiatry, University of Chicago School of Medicine, Chicago, Illinois.

SPECIALTY LECTURES:

9:30-11:00 a.m.—UROLOGICAL RADIOGRAPHY
RUSSELL B. ROTH, M.D., (Urology) Consultant Urologist, U.S. Veterans Administration Hospital, Erie, Pa.

9:30-11:00 a.m.—TUBE FEEDING
JAMES BARRON, M.D., (Surgery) Associate Surgeon, Division of General Surgery, Henry Ford Hospital, Detroit, Mich.

12:15 p.m.—LUNCHEON—ROUND TABLE DISCUSSION

GENERAL ASSEMBLY LECTURES:

2:00 p.m.—MANAGEMENT OF CONGESTIVE HEART FAILURE
C. THORPE RAY, M.D., (Medicine) Professor and Chairman Department of Medicine, University of Missouri School of Medicine, Columbia, Missouri.

2:30 p.m.—MENTAL RETARDATION
BLAIR E. BATSON, M.D., (Pediatrics) Professor and Head Department of Pediatrics, University of Mississippi School of Medicine, Jackson, Miss.

3:00 p.m.—VISIT THE EXHIBITS

3:30 p.m.—MECHANISMS OF NATURAL RESISTANCE TO INFECTIOUS MICROORGANISM
PARKER R. BEAMER, Ph.D., M.D., (Pathology) Professor of Pathology, Indiana University School of Medicine, Indianapolis, Indiana.

4:00 p.m.—THE INTERPRETATION OF THE VARIOUS TESTS IN EXAMINING A BACK
CLAUDE N. LAMBERT, M.D., (Orthopedic) Professor of Orthopedic Surgery, University of Illinois College of Medicine, Chicago, Illinois.

4:30 p.m.—EXTERNAL DISEASES OF THE EYE
HAROLD GIFFORD, JR., M.D., (Ophthalmology) Associate Professor of Ophthalmology, University of Nebraska College of Medicine, Omaha, Nebr.

SPECIALTY LECTURES:

2:30-4:00 p.m.—SYSTEMATIC LUPUS ERYTHEMATOSUS AND DERMATOMYOSITIS IN CHILDHOOD
Louis A. Brunsting, M.D.

2:30-4:00 p.m.—THE MEDICAL COMPLICATIONS OF PREGNANCY
Edwin J. DeCosta, M.D.

7:30 p.m.—BANQUET—SPONSORED BY THE OKLAHOMA COUNTY MEDICAL SOCIETY
Guest Speaker—RUSSELL B. ROTH, M.D., Erie, Pa.

Tuesday, October 28, 1958

GENERAL ASSEMBLY LECTURES:

9:00 a.m.—DAILY PRACTICE AND THE STETHOSCOPE
E. GREY DIMOND, M.D., (Medicine) Professor and Head Department of Medicine and Director of Cardiovascular Laboratory, University of Kansas Medical Center, Kansas City, Kansas.

9:30 a.m.—THE ITCHING SKIN
Louis A. Brunsting, M.D.

10:00 a.m.—VISIT THE EXHIBITS

10:30 a.m.—CLINICAL PATHOLOGICAL CONFERENCE
Parker R. Beamer, M.D.
C. Thorpe Ray, M.D.

SPECIALTY LECTURES:

9:30-11:00 a.m.—DIFFERENTIAL DIAGNOSIS AND TREATMENT OF BENIGN UTERINE BLEEDING
John A. Wall, M.D.

9:30-11:00 a.m.—CLINICAL AND PATHOLOGIC CORRELATION OF CATARACTS
Harold Gifford, Jr., M.D.

12:15 p.m. — LUNCHEON—ROUND-TABLE DISCUSSION

GENERAL ASSEMBLY LECTURES:

2:00 p.m.—NOBLE PLICATION OPERATION FOR PERITONEAL ADHESIONS
James Barron, M.D.

2:30 p.m.—THE PHYSICIAN'S ROLE IN MANAGEMENT OF PSYCHONEUROTIC REACTIONS
C. Knight Aldrich, M.D.

3:00 p.m.—VISIT THE EXHIBITS

3:30 p.m.—EXPERIENCES IN ATTEMPTING CONVERSION OF AURICULAR FILBRILLATION
E. Grey Dimond, M.D.

4:00 p.m.—ALLERGIC DRUG REACTIONS
John M. Sheldon, M.D.

4:30 p.m.—THE ANALYSIS OF JOINT DISEASES BY THE RADIOLOGIST
ISADORE MESCHAN, M.D., (Radiology) Professor and Director, Department of Radiology, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, N.C.

SPECIALTY LECTURES:

2:30-4:00 p.m.—THE PRESENT STATUS OF PANCREATICODUODENECTOMY FOR MALIGNANT TUMORS IN THE REGION OF THE HEAD OF THE PANCREAS WITH PARTICULAR EMPHASIS ON FACTORS WHICH REDUCE MORTALITY
JOHN T. REYNOLDS, M.D., (Surgery) Associate Professor of Surgery, University of Illinois College of Medicine, Chicago, Illinois.

2:30-4:00 p.m. — ACTIVE IMMUNIZATION — FACT AND FANCY
Blair E. Batson, M.D.

6:30 p.m.—SOCIAL HOUR—SPECIALTY GROUP DINNERS

Wednesday, October 29, 1958

GENERAL ASSEMBLY LECTURES:

9:00 a.m.—DIAGNOSIS AND TREATMENT OF ADENEXAL TUMORS
John A. Wall, M.D.

9:30 a.m.—HAZARDS OF OPERATION ON THE BILIARY TRACT
John T. Reynolds, M.D.

10:00 a.m.—VISIT THE EXHIBITS

10:30 a.m.—THE SHOULDER, HAND, ARM SYNDROME
Claude N. Lambert, M.D.

11:00 a.m.—MODERN CONCEPTS OF PRENATAL CARE
Edwin J. DeCosta, M.D.

11:30 a.m.—EMERGENCIES IN THE NEWBORN
Blair E. Batson, M.D.

SPECIALTY LECTURES:

9:30-11:00 a.m.—SEROLOGICAL AND CLINICAL EXPERIENCE WITH ADENO VIRUS IN ASTHMATIC PATIENTS
John M. Sheldon, M.D.

9:30-11:30 a.m.—HISTOPLASMOSIS: PATHOGENESIS IN RELATION TO THERAPY
Parker R. Beamer, M.D.

12:15 p.m.—LUNCHEON — ROUND-TABLE DISCUSSION

GENERAL ASSEMBLY LECTURES:

2:00 p.m.—THE REPAIR OF RECURRENT INGUINAL HERNIAS
James Barron, M.D.

2:30 p.m.—DISEASES OF THE RETINA AND CHOROID
Harold Gifford, Jr., M.D.

3:00 p.m.—VISIT THE EXHIBITS

3:30 p.m.—PROBLEMS IN THE DIFFERENTIAL DIAGNOSIS OF CHEST DISEASES
Isadore Meschan, M.D.

4:00 p.m.—THE ROLE OF SURGERY IN THE TREATMENT OF MAJOR GASTROINTESTINAL TRACT HEMORRHAGE WITH EMPHASIS UPON TIMING OF THE OPERATION
John T. Reynolds, M.D.

4:30 p.m.—PYELONEPHRITIS—AN UNMET CHALLENGE
Russell B. Roth, M.D.

SPECIALTY LECTURES:

2:30-4:00 p.m.—DIURETIC THERAPY
C. Thorpe Ray, M.D.

2:30-4:00 p.m.—THE USE AND ABUSE OF FEMORAL REPLACEMENT HIP PROSTHESES
Claude N. Lambert, M.D.

7:00 p.m.—ANNUAL DINNER-DANCE—SPONSORED BY THE OKLAHOMA CITY CHAMBER OF COMMERCE
Persian Room—Skirvin Tower Hotel

Registration fee for the Conference is $20.00. Further information and a program may be obtained by writing to: Oklahoma City Clinical Society, 503 Medical Arts Building, Oklahoma City, Oklahoma.

Woman's Auxiliary to Hold Fall Conference in October

The state fall conference of the Woman's Auxiliary to the Oklahoma State Medical Association will be held Tuesday, 9:30 a.m., October 14, 1958, at the State Medical Building, 601 N.W. Expressway, Oklahoma City. Mrs. Iron Hawthorne Nelson, Tulsa, president, and Mrs. Clifford M. Bassett, Cushing, president-elect, will bring reports of the national Auxiliary convention held in San Francisco, and the national Fall Conference recently held in Chicago. The new plans and projects for the state auxiliary will be presented by Mrs. J. J. Maril, Oklahoma City, state program committee chairman. The state officers and chairman of standing committees will have a part in the day long program. The county president, county committee chairmen, district councilors, and members at large from every section of Oklahoma will attend.

Events scheduled for the day include an early morning coffee, the executive board meeting, a surprise conference program and a luncheon. The annual fall conference is anticipated as the beginning of activities for the auxiliary year. Mrs. J. F. Blaschke will be in charge of arrangements.

New Lottinville Award for Excellence in Nursing was presented Mrs. Jenell D. Hubbard, left, Director of Nursing Service for the University of Oklahoma hospitals. With her are Dr. Mark R. Everett, dean and director of the Medical Center, and Savoie Lottinville, right, award donor and Director of the University of Oklahoma Press.

O.U. Nurse Wins Lottinville Award

Mrs. Jenell D. Hubbard, director of nursing service for the University of Oklahoma hospitals, has received the first Lottinville Award for Excellence in Nursing, presented jointly by the Oklahoma State Medical Association and the University of Oklahoma School of Medicine.

The award was established this year by Savoie Lottinville, director of the University of Oklahoma Press, Norman, in an effort to stimulate interest in the nursing profession. It consists of a certificate in Latin, the text set in Centaur type, and a Georgian Castle silver service.

Each year the award will be made to the outstanding graduate of either the diploma or the degree nursing program of the University of Oklahoma.

Adhering to the donor's wishes, selection will be made on the basis of excellence in class, ward and laboratory work; personal character, standing among fellow students and teacher; and potential influence as an active worker and leader in nursing.

Mrs. Hubbard was chosen by a committee representing OSMA, the School of Medicine, and the School of Nursing.

She was given the award September 3 at

School of Nursing finishing ceremonies at the Medical Center. Dr. Mark R. Everett, director and dean of the University of Oklahoma Medical Center, made the presentation.

Mrs. Hubbard is a candidate for the Bachelor of Science in Nursing degree. Graduating from the diploma program of the O.U. School of Nursing in 1946, she has served as staff nurse, head nurse, supervisor, instructor and then director of nursing service at the Medical Center. She is active in state and national professional organizations.

Twenty-four other nurses received school pins and diplomas during the program. Miss Ada Hawkins, director of the School of Nursing, presented them. Principal speaker was Doctor George Lythcott, instructor in the Department of Pediatrics.

Lottinville's daughter, Mrs. Marie Lottinville Livesay, is a 1957 graduate of the O.U. nursing program.

C. J. Masterson Cited By Association

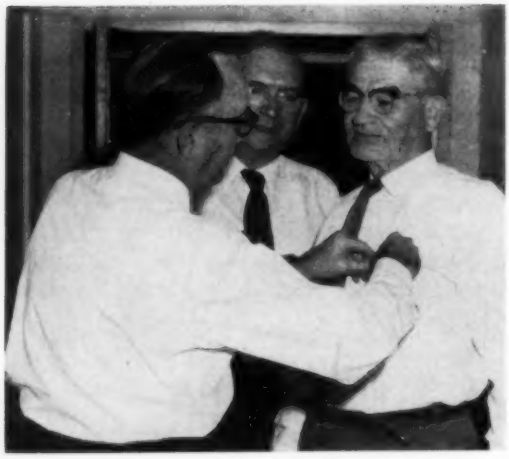
C. J. "Connie" Masterson, prominent Oklahoma City pharmacist, was honored by the Oklahoma State Medical Association at a luncheon held September 12 in recognition of service to the medical profession resulting from his sponsorship of a health education radio program for the past ten years. The presentation of a hand-lettered, gold framed Certificate of Appreciation by John F. Burton, M.D., 1957-58 President of the O.S.M.A., culminated efforts which began last spring to demonstrate the gratitude of the medical profession for the unselfish efforts of Mr. Masterson. His weekly radio programs on station KOCY, Oklahoma City, have done much to not only provide the public with authoritative health information, but have also led to a better understanding of the medical profession in general.

The unusual award was suggested by Mr. Carlton Beck of KOCY who contacted Doctor Burton about Mr. Masterson's contribution to better public understanding of medicine. Doctor Burton subsequently introduced the recommendation before the Council during the May, 1958 meeting and it was unanimously agreed that a commendation be issued in the following form:

> "WHEREAS for ten years various transcribed radio series such as 'Tell Me Doctor' have pioneered and accomplished a most laudable result in bringing to the public news of the very latest medical discoveries, discussions of important health subjects and pertinent information of benefit to good health and
>
> WHEREAS a most sincere man originally supported and has continued to support these programs entirely at his own expense with a motivation of bringing authoritative health information to the public and
>
> WHEREAS these programs have caused many favorable comments both on the part of the general public and the medical profession
>
> THEREFORE BE IT RESOLVED that the Oklahoma State Medical Association's House of Delegates assembled this Fourth day of May, 1958 go on record as unanimously giving C. J. Masterson a vote of appreciation for this unselfish and worthwhile endeavor."

The luncheon, which was held at the Lakeview Country Club, was attended by Mr. Masterson and his wife, Maude M. Masterson, M.D., Mr. Beck, Doctor Burton, James Amspacher, M.D., President of the Oklahoma County Medical Society, Glenn Jones, President of the Oklahoma County Pharmaceutical Association, Carroll Freeman, Executive Secretary of the Pharmaceutical Association, Dick Graham and Don Blair of the OSMA office and Alma O'Donnell, Executive Secretary of the Oklahoma County Medical Society.

Philip Herod, M.D. Receives 50 Year Pin



Clinton A. Gallaher, M.D., Speaker of the Association's House of Delegates, is shown presenting Philip Herod, M.D., with a Fifty Year Pin as Joseph T. Phelps, M.D., looks on.

At a September 8 meeting of the Canadian County Medical Society, Philip F. Herod, M.D., El Reno, received recognition for fifty years of medical service when Clinton Gallaher, M.D., Speaker of the O.S.M.A.'s House of Delegates presented him with a 50 Year Pin. The event was held during the regular staff meeting of the Park View Hospital, El Reno. Physicians from El Reno and surrounding communities were present to honor Doctor Herod.

The EENT specialist graduated from University Medical College, Kansas City, in 1908. He received his Oklahoma license in the same year.

In addition to Doctor Gallaher who traveled from Shawnee to make the presentation, other guest well wishers were Ben H. Nicholson, M.D., Oklahoma City, Editor of the *O.S.M.A. Journal* and Dick Graham and Don Blair of the Association's Executive Office.

Journal Staff to Attend Texas Conference

Representatives of the *Journal of the Oklahoma State Medical Association* will participate in the Regional State Medical Journal Conference to be held in Austin on October 18 and 19. Designed to fill the gap between biennial meetings sponsored by the State Medical Journal Advertising Bureau, the regional meetings were begun two years ago when the Medical Association of Georgia promoted the first conference.

Don Blair, Associate Business Manager of the *Journal* and Mrs. Louise Martin, Editorial Assistant, are scheduled to represent Oklahoma. The Transcript Company, *Journal* printer, is planning to send their representative, Mr. Gene Nance, as they have done in past conferences.

An outstanding roster of guest speakers has been assembled by the Texas Medical Association, this year's sponsor. The program participants are: De Witt C. Reddick, Ph.D., Professor and Acting Director of the School of Journalism, University of Texas, Austin; Millard J. Heath, Executive Secretary, Dallas County Medical Society; Jack Woodside, Director of Production, Fuller and Smith and Ross, Inc., Publications Counselor for Eli Lilly, Cleveland; Alfred J. Jackson, President, State Medical Journal Advertising Bureau, Chicago; James T. Barnes, Executive Secretary, Medical Society of North Carolina, Raleigh; Philip R. Overton, Ll.B., General Counsel, Texas Medical Association, Austin; Tom Jarvis, Assistant Managing Editor, *Journal of the Florida Medical Association*, Jacksonville; Edgar Woody, M.D., Editor, *Journal of the Medical Association of Georgia*, Atlanta; James M. Liston, Editor, *Today's Health*, Chicago; and, Bernice M. Moore, Ph.D., Assistant to the Director, Community Programs and Professional Education, the Hogg Foundation for Mental Health, and Consultant, Home and Family Life Education, Texas Education Agency, Austin.

Don Blair will preside over the October 18 afternoon session and moderate a panel covering such subjects as printing, office overhead and advertising solicitation.

AMA Program On Aging Presented at Planning Conference

Representatives of state medical societies assembled in Chicago on September 13-14 for an AMA sponsored planning conference designed to kickoff a national health program for older citizens. The Oklahoma delegation was comprised of Hayden H. Donahue, M.D., Chairman of the State Association Committee for the Health Care of the Aged; Committee members Henry H. Turner, M.D., and Samuel C. Shepard, M.D., John W. DeVore, M.D., Forrest Brown, M.D., John Grey, M.D., and John F. Burton, M.D., member of the AMA's Council on Medical Service.

The purpose of the meeting was to coordinate medicine's activities in the field of aging and to stimulate individual and community responsibility, rather than wait for the passage of a political solution to the problem.

Members of the Oklahoma Committee will meet soon to begin planning the implimentation of the state phase of the national program. The AMA six-point program is outlined briefly below. More detailed information will be disseminated by the OSMA Committee in subsequent issues of *The Journal.*

The Program

The six-point program has been developed as a basis for action by medicine in the field of aging. It offers a challenge to medical societies at national, state and local levels. It recognizes that the special needs of senior citizens ultimately must be related to persons. Consequently such needs should be met as far as practical at that level closest to the individual.

Medical and health problems of aging and the aged embrace special social, economic, psychological, physiological, and occupational considerations. Approaches to the solution, prevention, or reduction of these problems affect both young and old; they call for community and individual action.

Preparation for old age, to be realistic, must begin in youth and continue throughout life. This need for preparation has become increasingly important. It should be recognized and acted upon by all people.

Immediate problems of the older person concern recognition of his role in the community together with the condition under which he works and lives. *Every element of daily living ought to be examined in the light of all factors, including those peculiar to him and those common to all persons.* Such areas would embrace health maintenance; hospitals, nursing homes and related facilities; financing medical care; income maintenance; employment and retirement; housing; recreation; education; and individual, family and community responsibilities.

The present and anticipated size of the aged population makes it imperative that medical societies at all levels foster efforts aimed at:

1. Stimulation of a realistic attitude toward aging by all people.
2. Extension of effective methods of financing health care for the aged.
3. Expansion of skilled-personnel training programs and improvement of medical and related facilities for older people.
4. Promotion of health maintenance programs and wider use of restorative and rehabilitative services.
5. Amplification of medical and socio-economic research in problems of the aging.
6. Cooperation in community programs for senior citizens.

State and local medical societies have been urged to establish committees on aging capable of providing leadership at the levels where this program ultimately must be implemented. It is anticipated these committees will serve both as a stimulus to medical society action and as advisors to other groups on medical and related matters in the field of aging.

Because of the dynamic character of the problems, any program must be flexible. This one may need to be adapted to apply more closely to state and local needs. The objectives it sets forth, emphasizing the roles in aging which medicine should urge upon the community, the family, and individuals of all ages, however, are basic to satisfactory solutions of the aging problem.

25 YEARS AGO

Articles published in *The Journal* of the Oklahoma State Medical Association October, 1933.

ECTOPIC PREGNANCY AND ITS TREATMENT

R. B. GIBSON, M.D., Ponca City

Riolamus in 1604, was the first to describe definitely a case in which the foetus was found in the fallopian tubes. As far back as 1594, a Primeron operated a woman and found a dead foetus in a cyst, which had formed near the umbilicus. Many such operations were performed at long intervals, but Lawson Tate in 1883, was the first to operate deliberately on a case of tubal rupture.

This condition is one which in my opinion is very important for it is not very rare, and is one that I consider a real emergency. Shuman estimated that at least one tubal pregnancy occurred to every 300 normal pregnancies. My reason for saying that this is an important subject is, if we can recognize these cases early, and institute proper treatment we can save nearly all of them, but if we fail to diagnose them we often fail to give them proper treatment, and the patient is lost because of our mistakes.

Mortality

Statistics show us that in an efficient hospital with competent surgeons the mortality should not be over four per cent, while in 1876, just seven years before Tate's first operation, Parry published the results of five hundred cases treated conservatively with 7.2 per cent mortality. With a comparison of these figures we can feel sure that radical treatment is correct, and we cannot pay too much tribute to the gynecologists who have advanced our knowledge of the pathology, diagnosis and treatment of this condition.

Editorial Notes—Personal and General

DR. AND MRS. FRED C. REWERTS, Bartlesville, will spend the next four months in Europe, where Dr. Rewerts will take postgraduate work in Vienna.

DR. KEILLER HAYNIE, Durant, son of Dr. John Haynie, graduated from the University of Medicine in June, 1933. He is now serving his internship in the University Hospital, Oklahoma City.

". . . ST. JOHN'S HOSPITAL, Tulsa, has offered to take over the care of county patients, promising a reduction of approximately $30,000. The Board of Governors and staff of the hospital stated that in their opinion the county work should be divided between the two larger hospitals, St. John's and Morningside.

Deaths

ALBERT CATES, M.D.
1879-1958

Albert Cates, M.D., retired pioneer Oklahoma physician, died in Oklahoma City, September 5, 1958.

Born in Bonanzo, Texas in 1879, Doctor Cates taught school for four years in Hopkins County, Texas before entering the University of the South at Sewanee, Tennessee. He graduated from the Memphis Hospital Medical College in 1906 and the same year began his practice of medicine at Lula, Oklahoma. Later, he practiced in Tueplo and Ardmore and moved to Oklahoma City in 1921.

Doctor Cates served as County Health Superintendent for many years. In addition to his membership in the State and American Medical Associations, Doctor Cates was a member of the Southern Medical Association.

JOHN F. HACKLER, M.D.
1910-1958

John F. Hackler, M.D., 47-year-old, Muskogee physician, died September 4, 1958. He was born in Tahlequah in 1910 and graduated from the University of Oklahoma School of Medicine in 1933.

Doctor Hackler entered private practice in Seminole, later becoming Director of the Payne County Health Department. In 1940, he received his master's degree from John Hopkins University, specializing in public health.

After serving as director of the field advisory staff of the Oklahoma Health Department for three years, Doctor Hackler served five years as the first full-time Professor of Preventive Medicine and Public Health at the University of Oklahoma School of Medicine.

In addition to serving on the Committee of the American Public Health Association that worked with the American Medical Association in establishing the American Board of Preventive Medicine and Public Health to certify specialists, Doctor Hackler served as Chairman of the Records Committee of the State Health Department and was on the Board of Directors of the Oklahoma Division of the American Cancer Society.

Since 1948, Doctor Hackler has been Director of the Muskogee city-county health unit.

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Cordially,

E. C. Mohler, M.D.

E. C. MOHLER, M.D.
President

PHYSICIAN PLACEMENT

General Practice

William Z. Cook, Jr., M.D., 1614 Wolverton, Ardmore, Oklahoma, age 31, married, graduated from University of Oklahoma School of Medicine, 1955. Will be available November 1, 1958 upon completion of service.

Albert Stanley Bailey, Jr., M.D., P.O. Box 1381, Westhampton Beach, L. I., New York, age 28, married, graduated from University of Oklahoma, 1955, presently in military service, will be available May, 1959.

John W. Kennard, M.D., 20 Olson Lane, Fort Rucker, Alabama, age 26, married, graduated from Bowman Gray School of Medicine, 1956, presently in military service, will be available September, 1959.

Robert Nordling, M.D., 508 Perrineau, Spartanburg, South Carolina, age 38, married, graduated from University of Nebraska, 1958, over present age limit for military duty, will be available July 1, 1959. (Doctor Nordling has expressed an interest in a town that is near a large lake.)

Gladys Smith, M.D., 800 N.E. 13th, Oklahoma City, Oklahoma, single, graduated from University of Oklahoma School of Medicine, 1947, board qualified in Radiology and is interested in doing a combination of general practice and Radiology.

John D. Wise, Booneville, Arkansas, age 30, married, graduated from University of Arkansas, 1954, veteran, available immediately.

Gerald C. Zumwalt, M.D., 1701 Avenue P, Del Rio, Texas, age 27, married, graduated from University of Oklahoma, 1956, veteran, will be available July, 1959.

Locum Tenens

Don Allen Mills, M.D., 3911 Burns Place, S.E., Washington, D.C., age 34, married, veteran, graduated from Georgetown University School of Medicine, 1958, wants to do general practice for two years prior to specialized training. Will be available July 1, 1959.

Psychiatry

C. Frank Knox, M.D., 1922 Northwood Apartments, Ann Arbor, Michigan, married, age 32, graduated from Washington University, St. Louis, Missouri, 1954, veteran, now completing a four years psychiatric residency, will be available June, 1959.

Surgery

(Name on Request) 32 years old, married, graduated from Tulane, 1952, veteran, board eligible in surgery.

CLASSIFIED ADS

OBSTETRICIAN-GYNECOLOGIST WANTED: Excellent opportunity, progressive 3 man group, community 30,000. Well established, complete clinic and hospital facilities. Board qualified. Equity interest without investment after probation. Write Key C, c/o The Journal Oklahoma State Medical Association, P.O. Box 9696, Shartel Station, Oklahoma City, Oklahoma.

ORTHOPEDIC SURGEON, also Pediatrician to head departments. Excellent opportunity. Write Cooper Clinic, Cooper Clinic Building, Fort Smith, Arkansas.

FOR SALE: Physicians equipment including 100 M.A. Westinghouse x-ray with fluoroscope. $2,500.00. Will sell x-ray separately. Contact Bob Grundy, Grundy Rexall Drug, Comanche, Oklahoma.

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